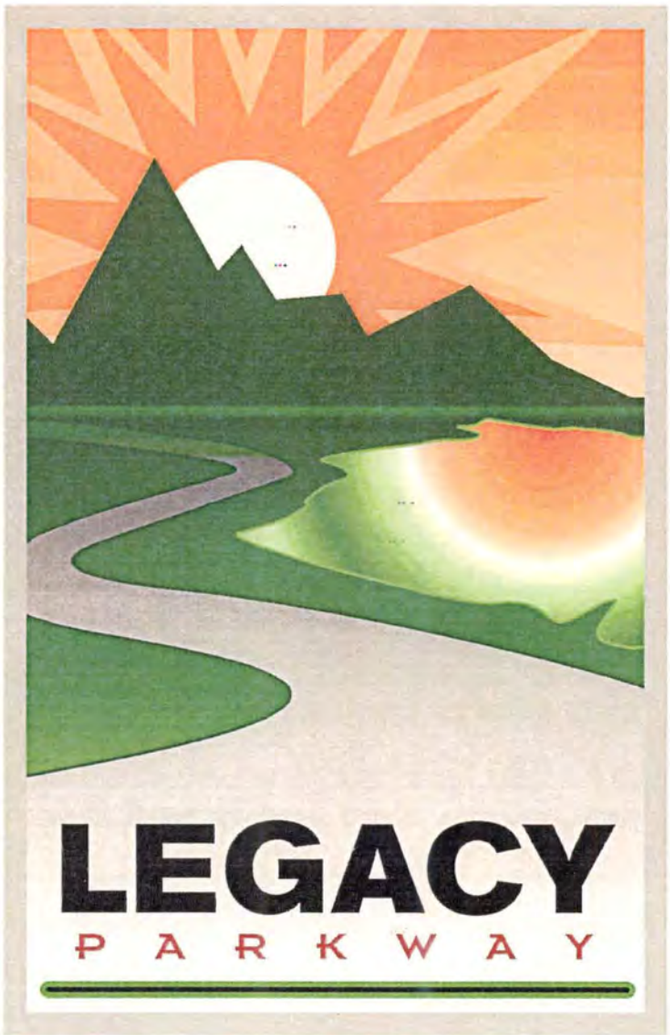
REPORT OF GEOTECHNICAL FIELD AND LABORATORY INVESTIGATIONS LEGACY PARKWAY PREFERRED ALTERNATIVE SALT LAKE AND DAVIS COUNTIES, UTAH

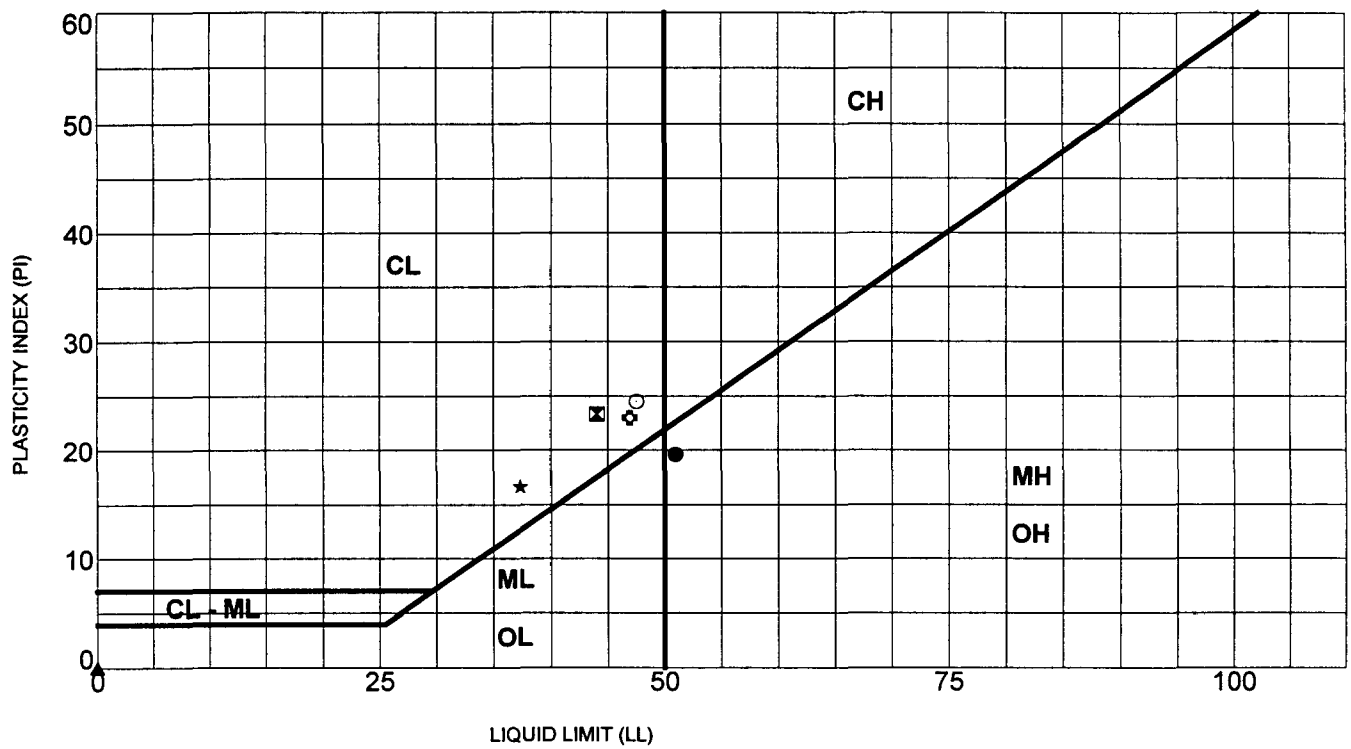
VOLUME 4 OF 4



Prepared for: HDR *and* UDOT

Prepared by: KLEINFELDER

PLASTICITY CHART



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 1-243	4.6	51	31	20	Elastic SILT (MH)
⊠	SB- 1-243	13.4	44	21	23	Lean CLAY (CL)
▲	SB- 1-246	12.2	NP	NP	NP	SILT (ML)
★	SB- 1-246	22.9	37	21	17	Lean CLAY (CL)
○	SB- 2-247	7.6	48	23	24	Lean CLAY (CL)
✿	SB- 3-248	7.6	47	24	23	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

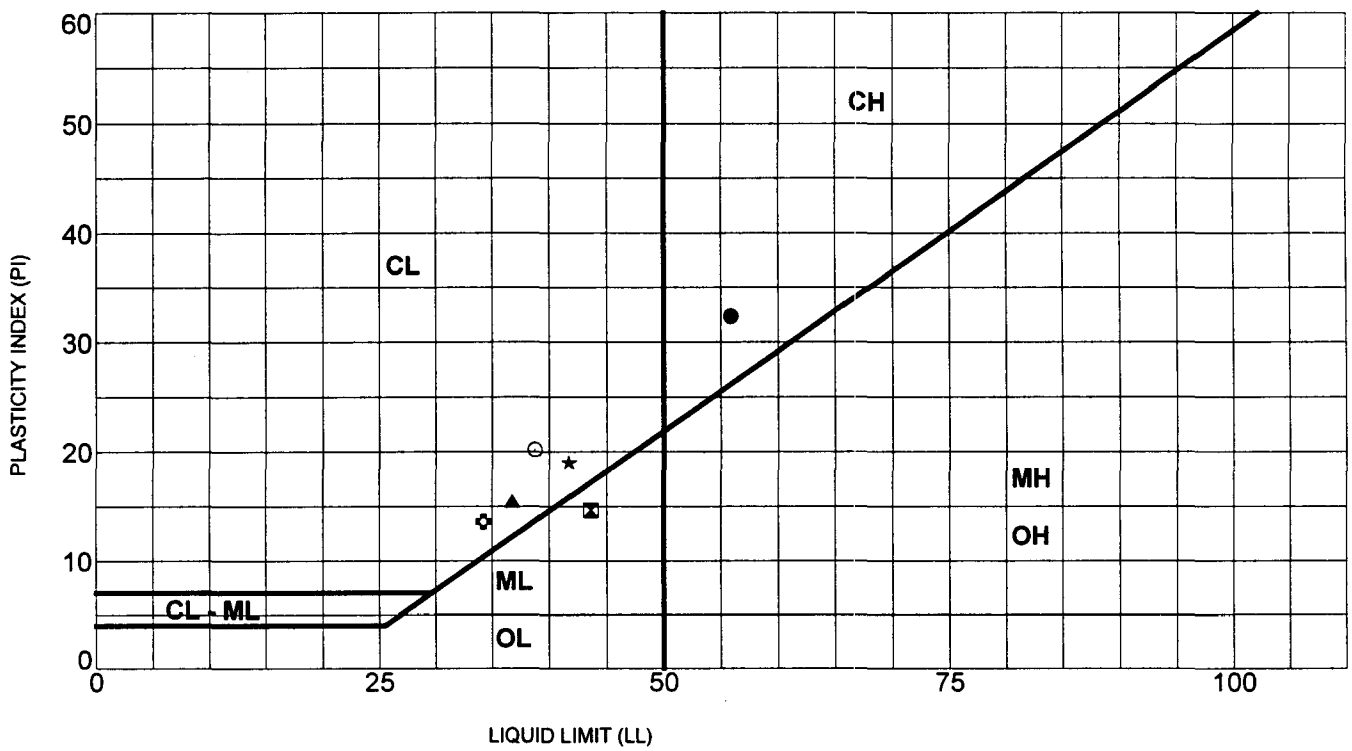
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-1



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 3-248	24.4	56	24	32	Fat CLAY (CL)
⊠	SB- 3-249	6.1	44	29	15	SILT (ML)
▲	SB- 3-249	15.2	37	21	15	Lean CLAY (CL)
★	SB- 3-250	9.1	42	23	19	Lean CLAY (CL)
⊙	SB- 3-250	15.2	39	19	20	Lean CLAY (CL)
✿	SB- 4-251	3.0	34	21	14	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

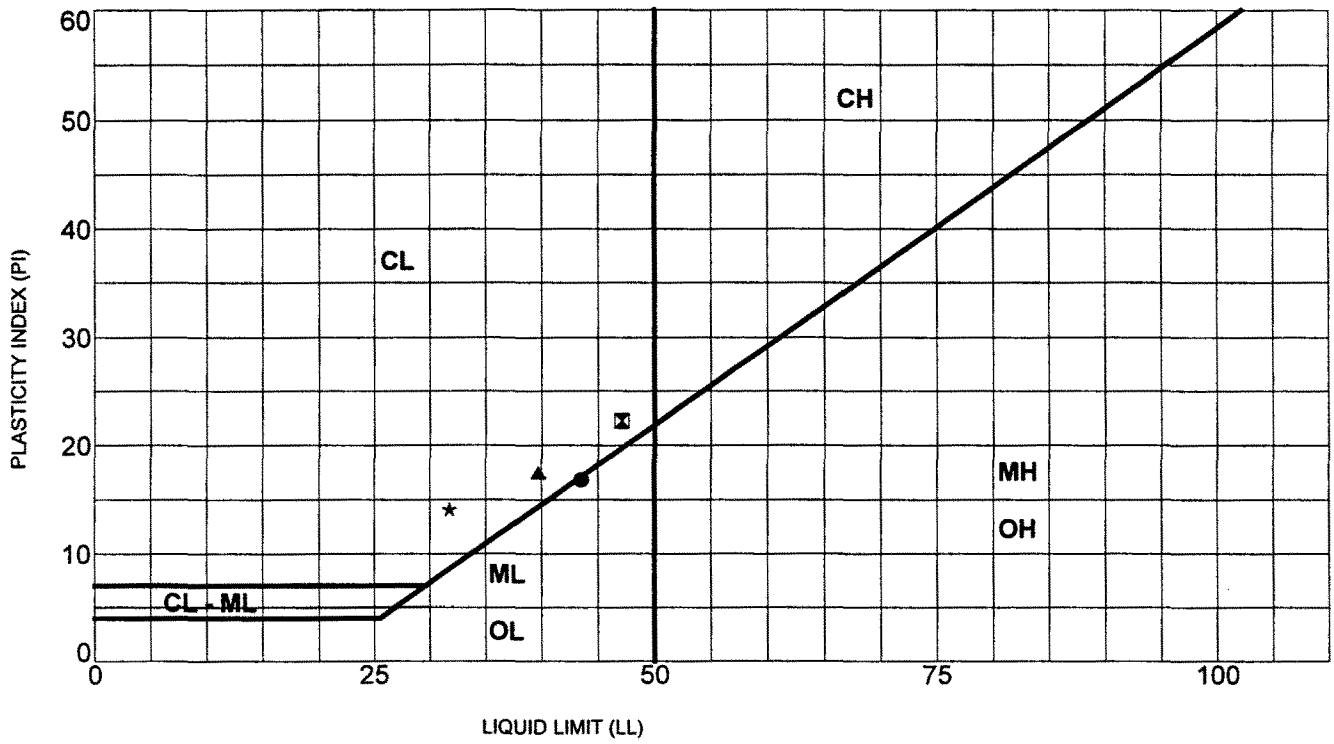
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-2



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 4-251	6.7	44	27	17	SILT (ML)
⊠	SB- 4-251	25.9	47	25	22	Lean CLAY (CL)
▲	SB- 4-252	7.6	40	22	17	Lean CLAY (CL)
★	SB- 4-252	13.7	32	18	14	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

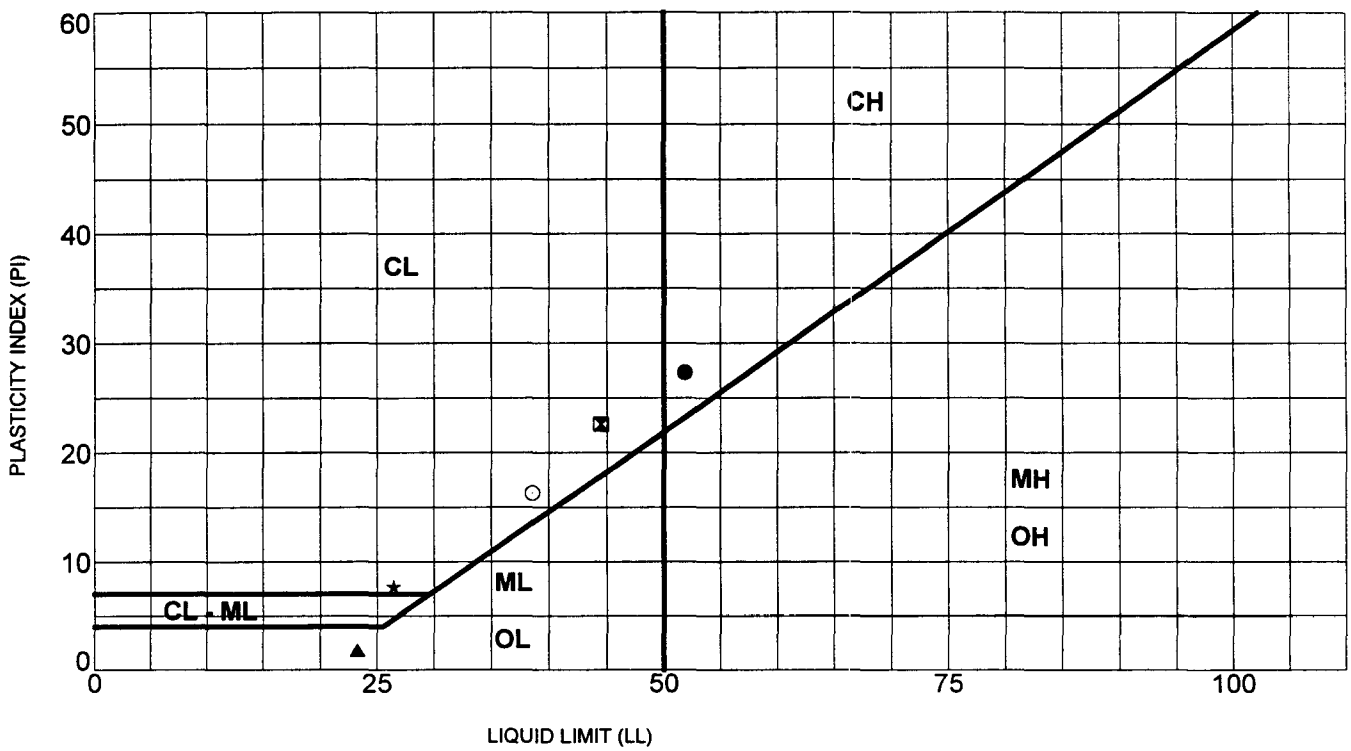
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-3



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 5-293	1.5	52	25	27	Fat CLAY (CH)
⊠	SB- 5-293	9.1	44	22	23	Lean CLAY (CL)
▲	SB- 5-297	3.0	23	22	2	SILT (ML)
★	SB- 5-297	10.7	26	19	8	Lean CLAY (CL)
○	SB- 5-297	21.3	39	22	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

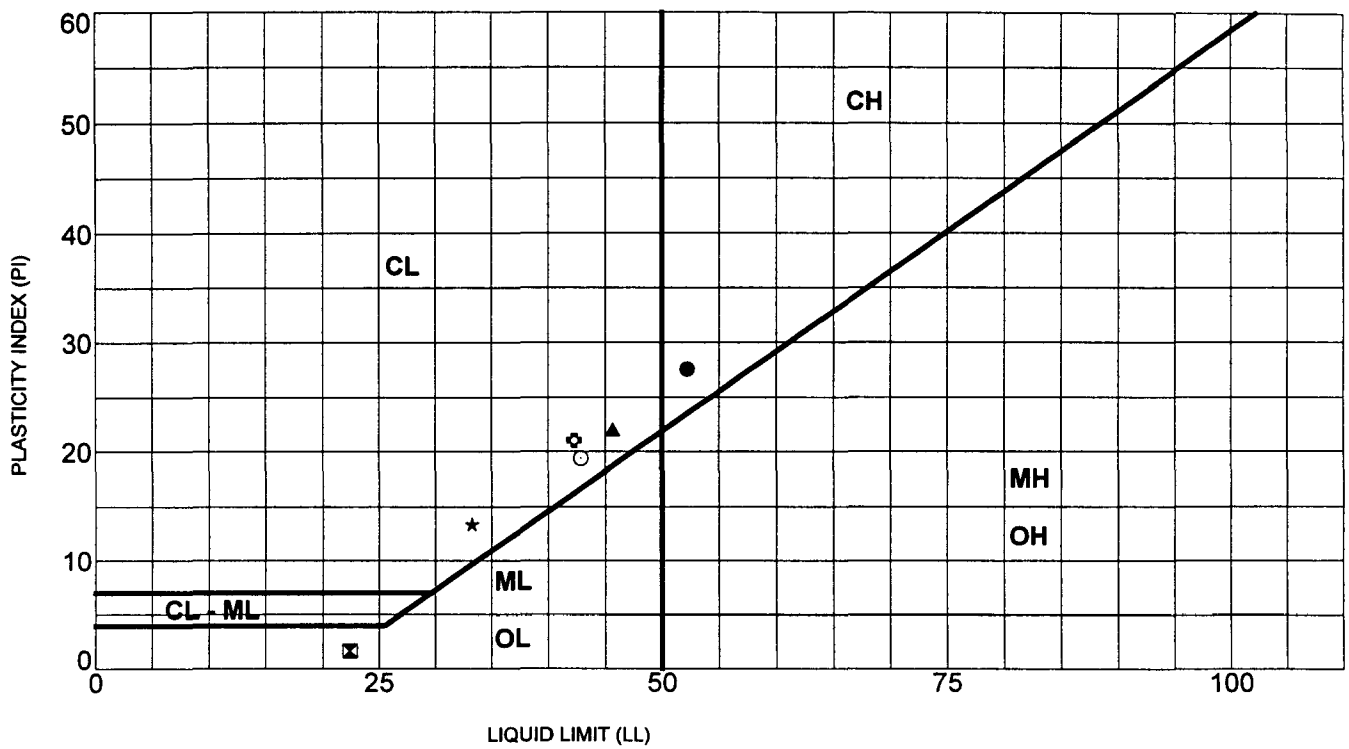
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-4



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 6-323	10.7	52	25	28	Fat CLAY (CH)
⊠	SB- 6-323	32.0	22	21	2	SILT (ML)
▲	SB- 6-327	3.0	46	24	22	Lean CLAY (CL)
★	SB- 6-327	24.4	33	20	13	Lean CLAY (CL)
○	SB- 6-328	1.5	43	23	19	Lean CLAY (CL)
✿	SB- 6-333	4.6	42	21	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

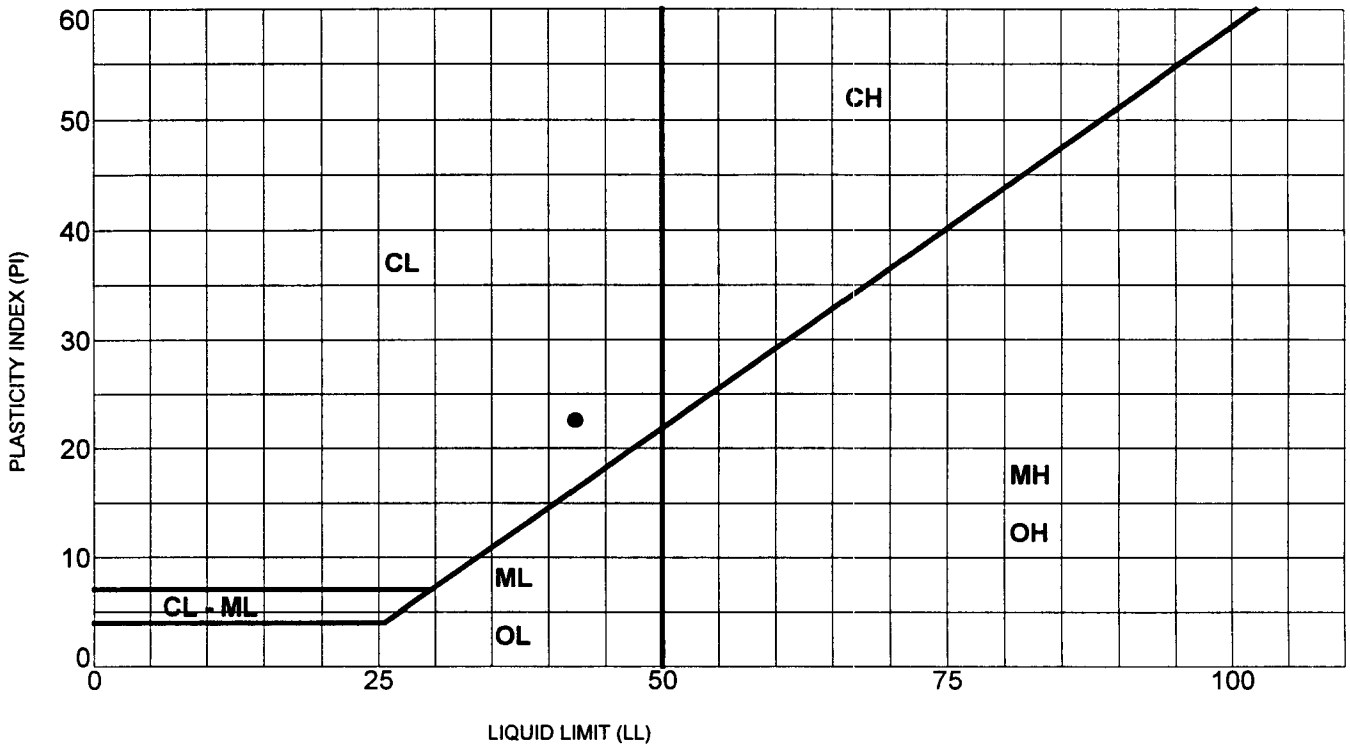
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-5



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 6-333	7.6	42	20	23	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

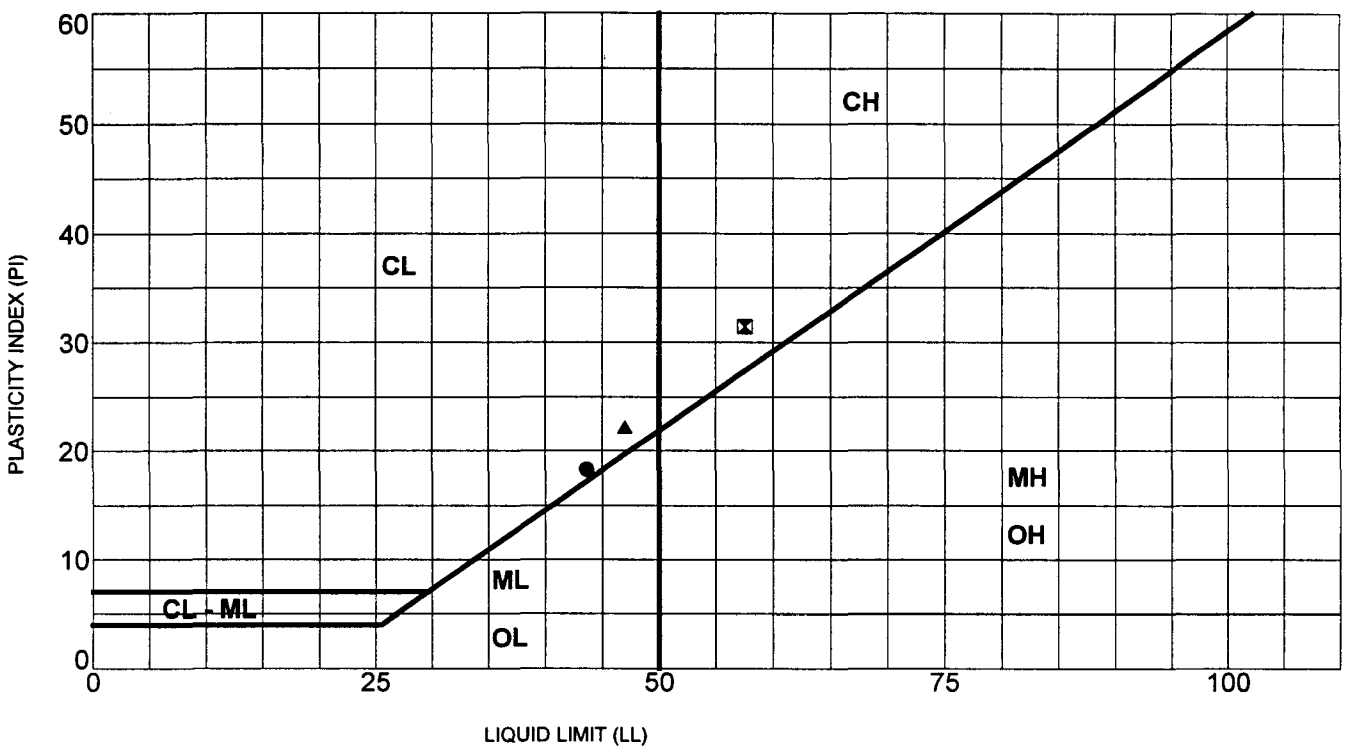
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-6



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 8-253	3.0	44	25	18	Lean CLAY (CL)
⊠	SB- 8-254	3.0	58	26	31	Fat CLAY (CH)
▲	SB- 8-254	18.3	47	25	22	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

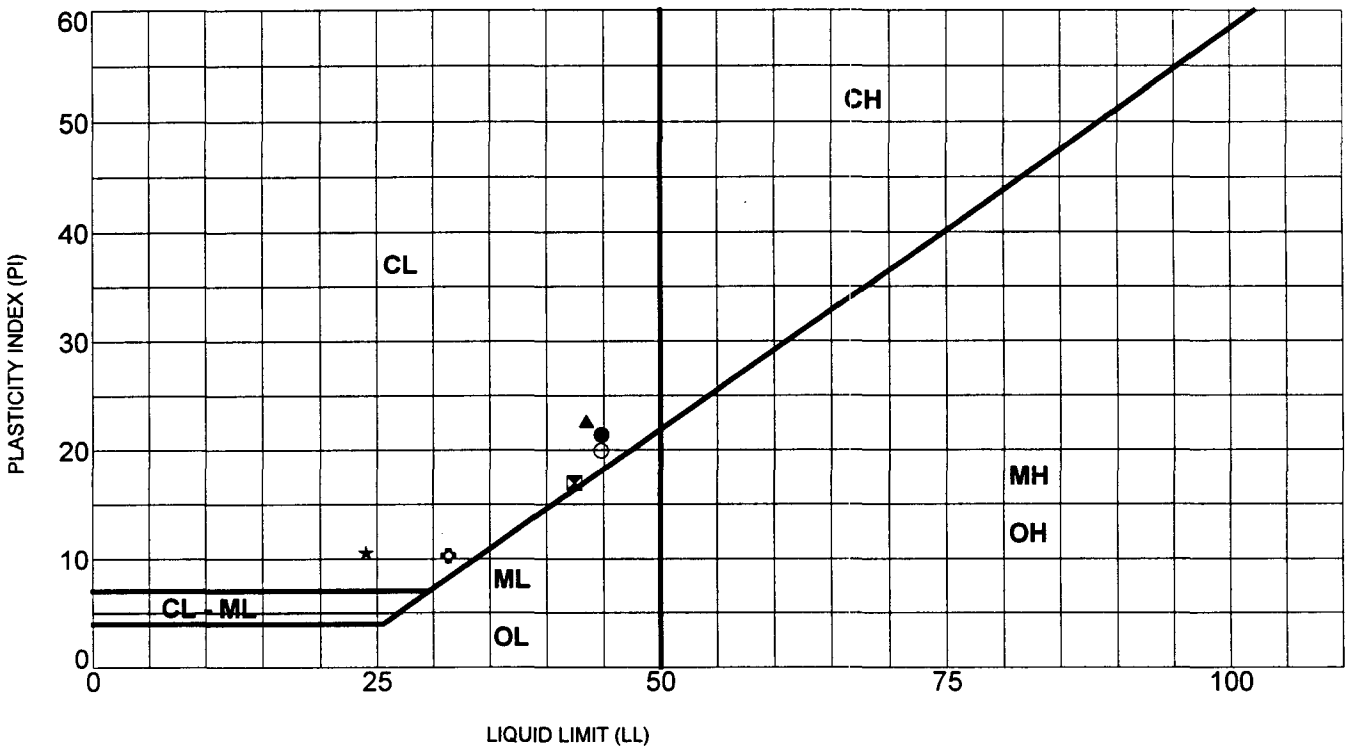
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-7



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 9-298	1.5	45	23	21	Lean CLAY (CL)
⊠	SB- 9-298	10.7	42	25	17	Lean CLAY (CL)
▲	SB- 9-298	21.3	43	21	23	Sandy Lean CLAY (CL)
★	SB- 9-298	30.5	24	13	11	Lean CLAY (CL)
○	SB- 9-299	5.2	45	25	20	Lean CLAY (CL)
✿	SB- 9-299	7.6	31	21	10	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

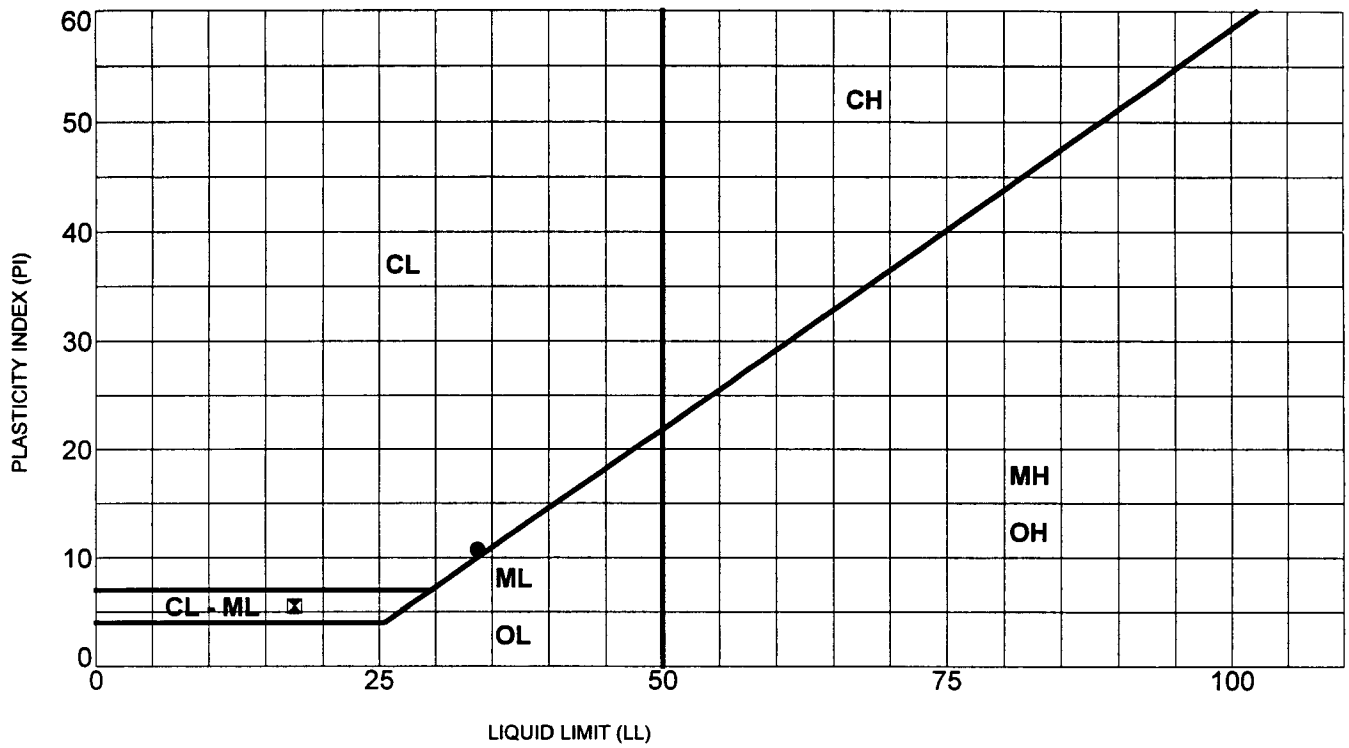
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-8



	Sample	Depth (m)	LL	PL	PI	Description
●	SB- 9-299	18.3	34	23	11	Lean CLAY (CL)
⊠	SB- 9-299	35.1	17	12	6	Silty CLAY (CL-ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

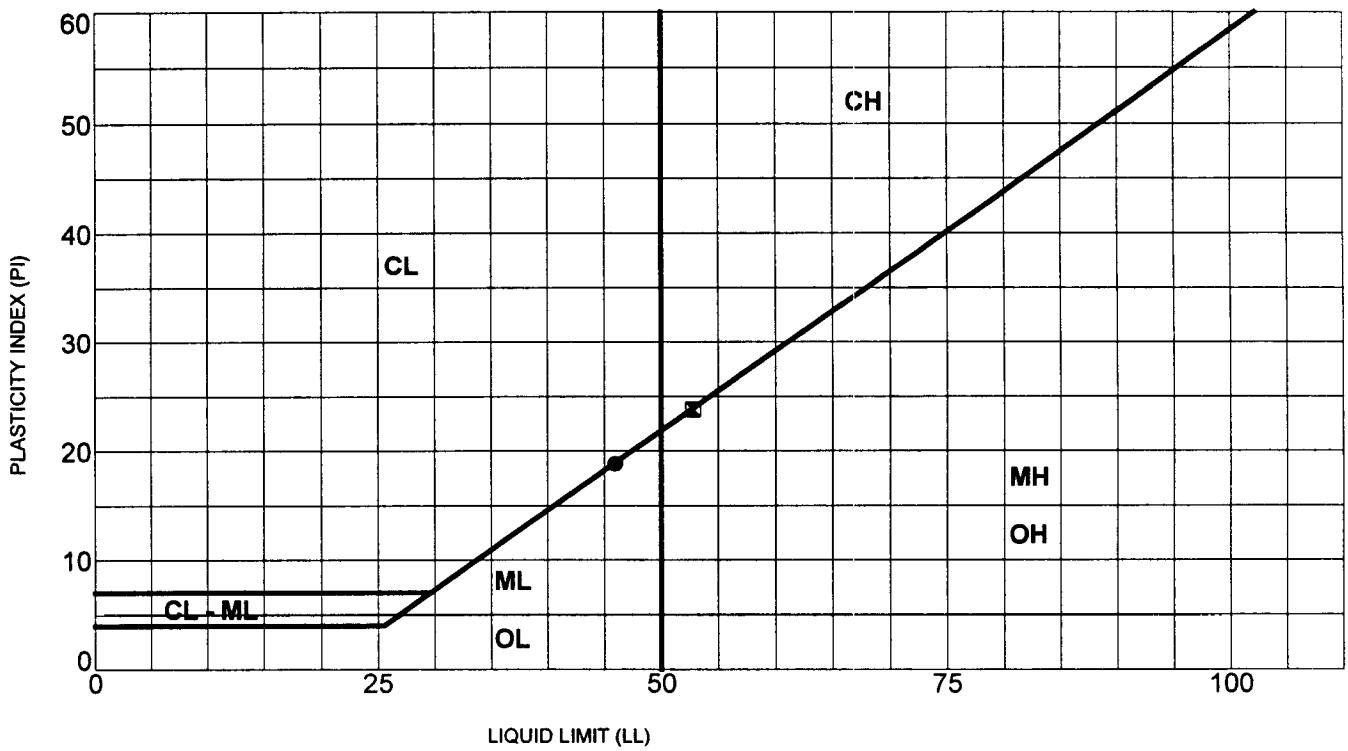
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-9



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-10-300	3.0	46	27	19	Lean CLAY (CL)
⊠	SB-10-300	13.7	53	29	24	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

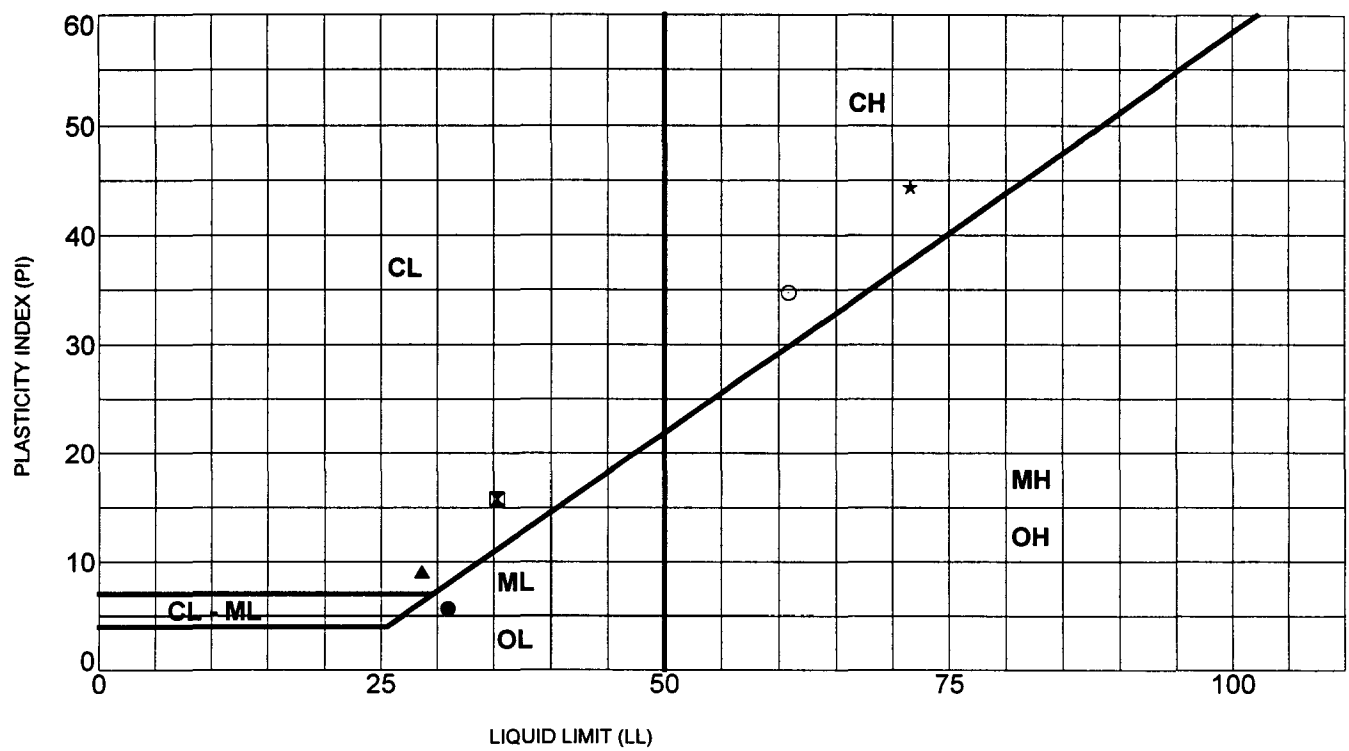
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-10



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-11-259	8.8	31	25	6	Sandy SILT (ML)
⊠	SB-11-259	27.1	35	19	16	Clayey SAND (SC)
▲	SB-11-262	7.6	29	20	9	Sandy Lean CLAY (CL)
★	SB-11-262	12.2	72	27	44	Fat CLAY (CH)
○	SB-11-262	16.8	61	26	35	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

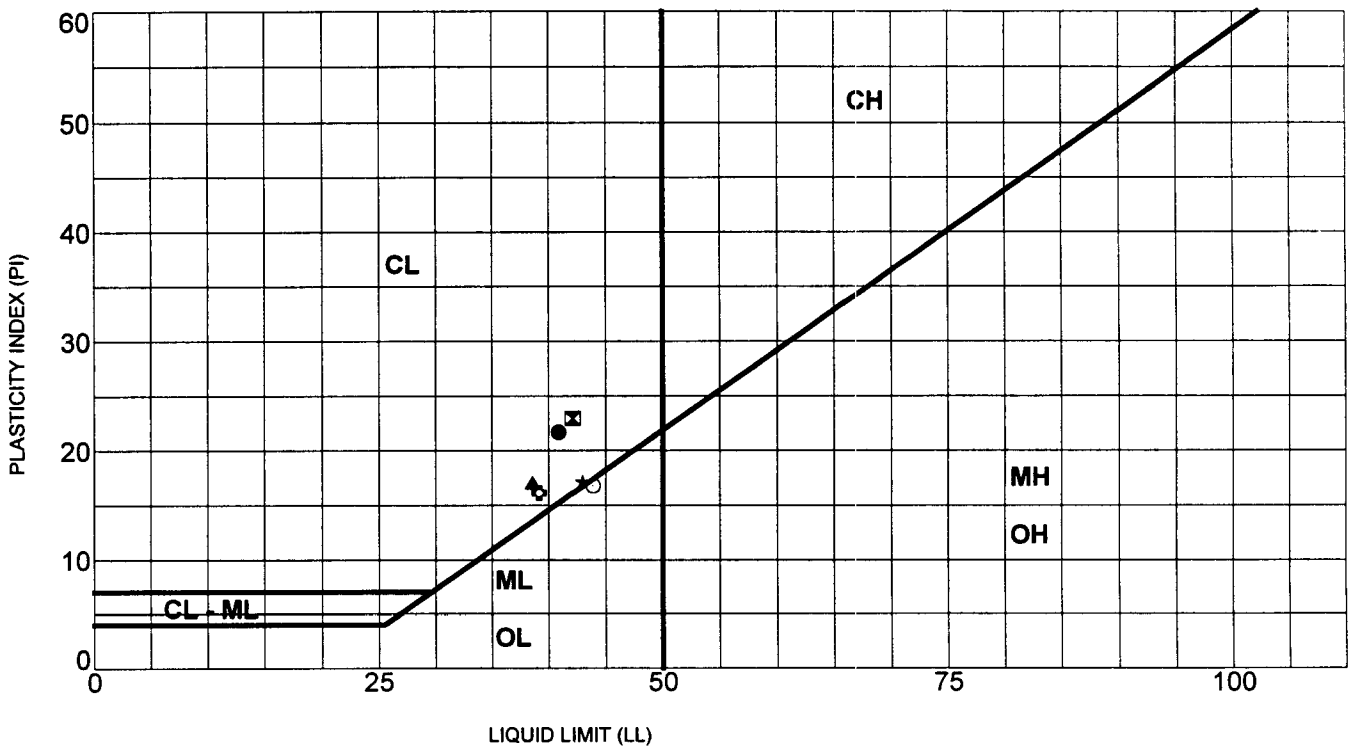
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-11



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-12-263	5.2	41	19	22	Lean CLAY (CL)
⊠	SB-12-263	18.3	42	19	23	Lean CLAY (CL)
▲	SB-12-265	4.6	39	21	17	Lean CLAY (CL)
★	SB-12-265	30.5	43	26	17	Lean CLAY (CL)
○	SB-12-265	48.8	44	27	17	SILT (ML)
✿	SB-12-265	73.2	39	23	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

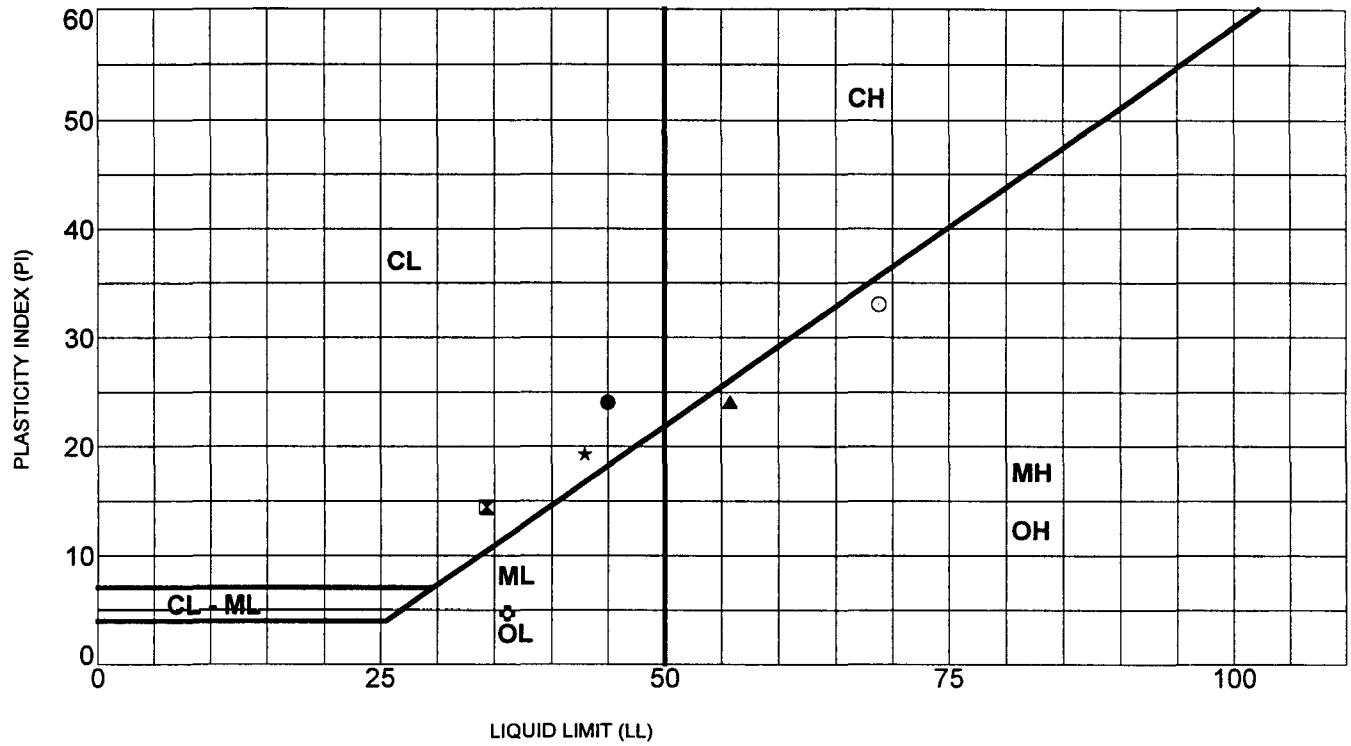
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-12



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-13-304	4.6	45	21	24	Lean CLAY (CL)
⊠	SB-13-304	27.4	34	20	14	Sandy Lean CLAY (CL)
▲	SB-13-308	8.2	56	32	24	Elastic SILT (MH)
★	SB-14-309	4.3	43	24	19	Lean CLAY (CL)
○	SB-14-313	7.6	69	36	33	Elastic SILT (MH)
✿	SB-14-313	53.3	36	31	5	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

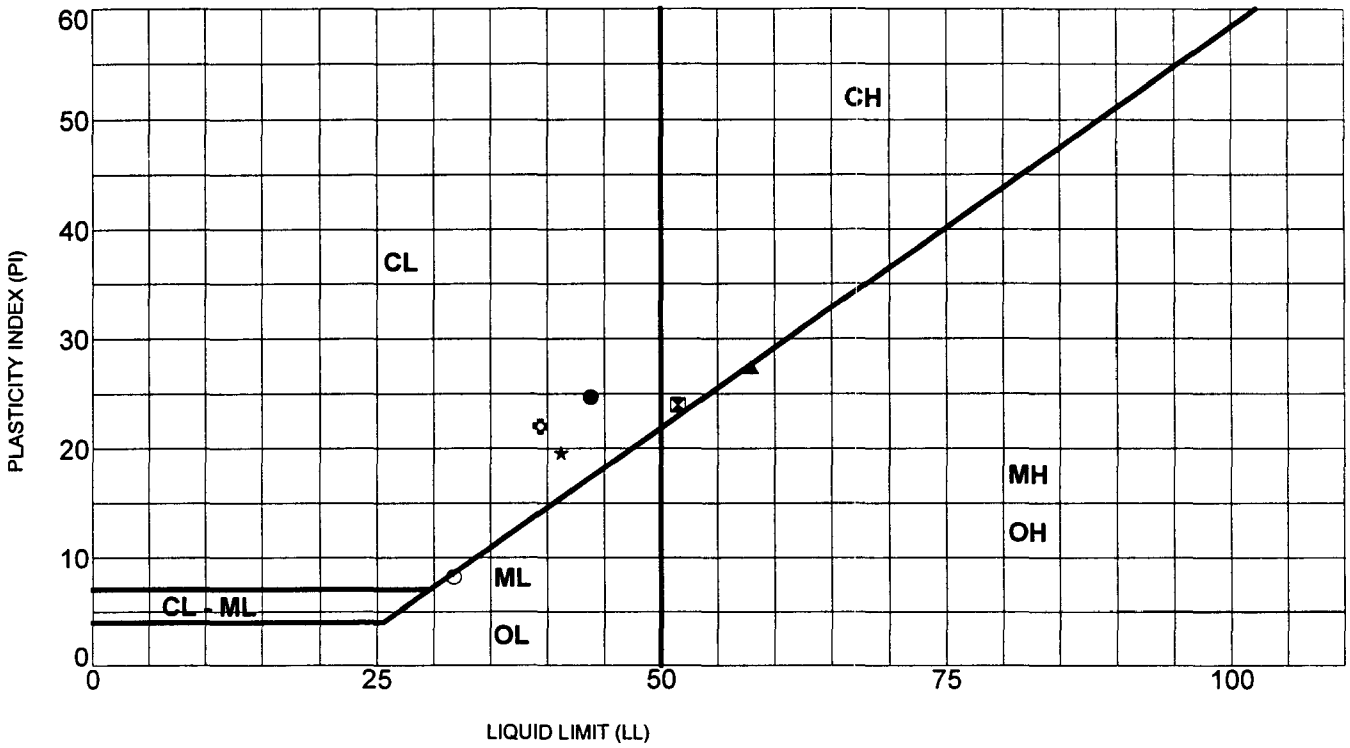
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-13



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-15-266	3.0	44	19	25	Lean CLAY (CL)
⊠	SB-15-266	9.1	51	27	24	Fat CLAY (CH)
▲	SB-15-266	24.4	58	31	27	Elastic SILT (MH)
★	SB-15-267	5.5	41	22	20	Lean CLAY (CL)
○	SB-15-267	27.4	32	24	8	SILT (ML)
✿	SB-1504-359	1.5	39	17	22	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

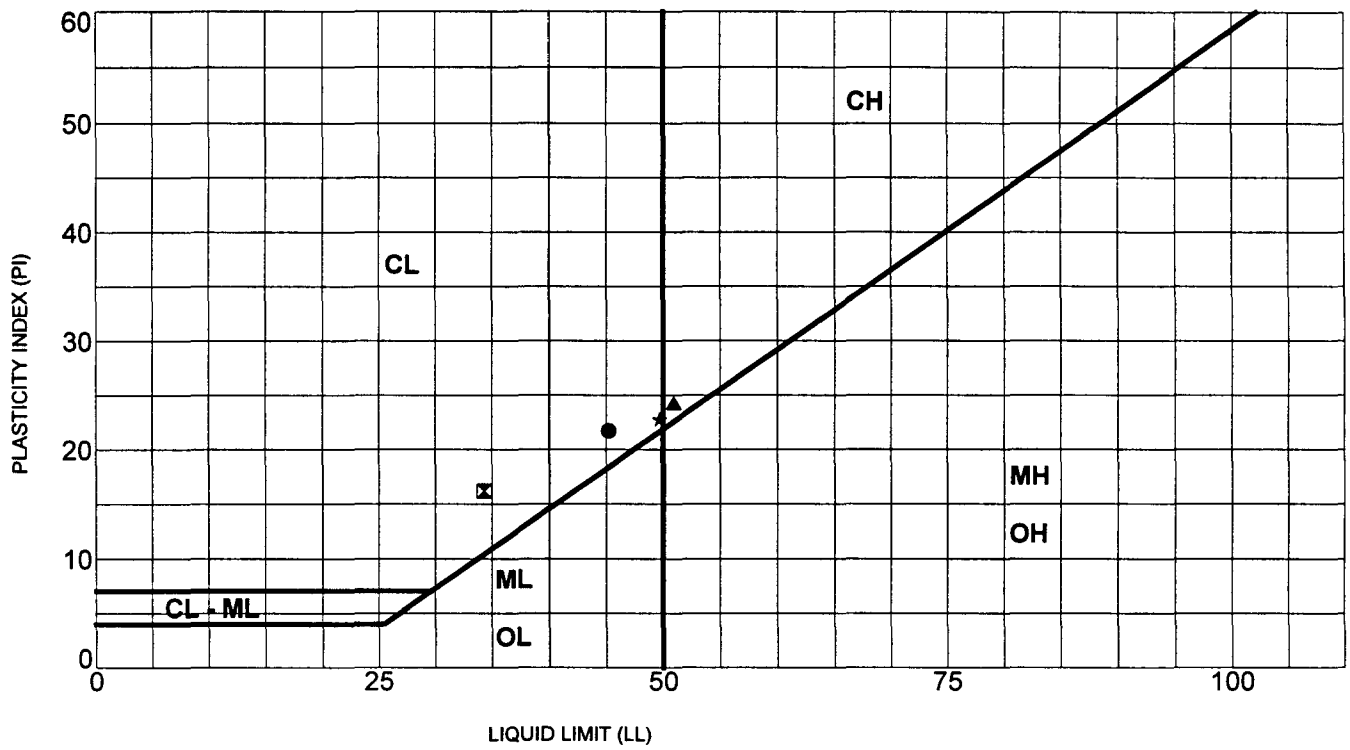
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-14



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-1504-359	11.9	45	23	22	Lean CLAY (CL)
⊠	SB-1504-359	24.1	34	18	16	Lean CLAY (CL)
▲	SB-1504-359	51.5	51	27	24	Fat CLAY (CH)
★	SB-16-362	7.5	50	27	23	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

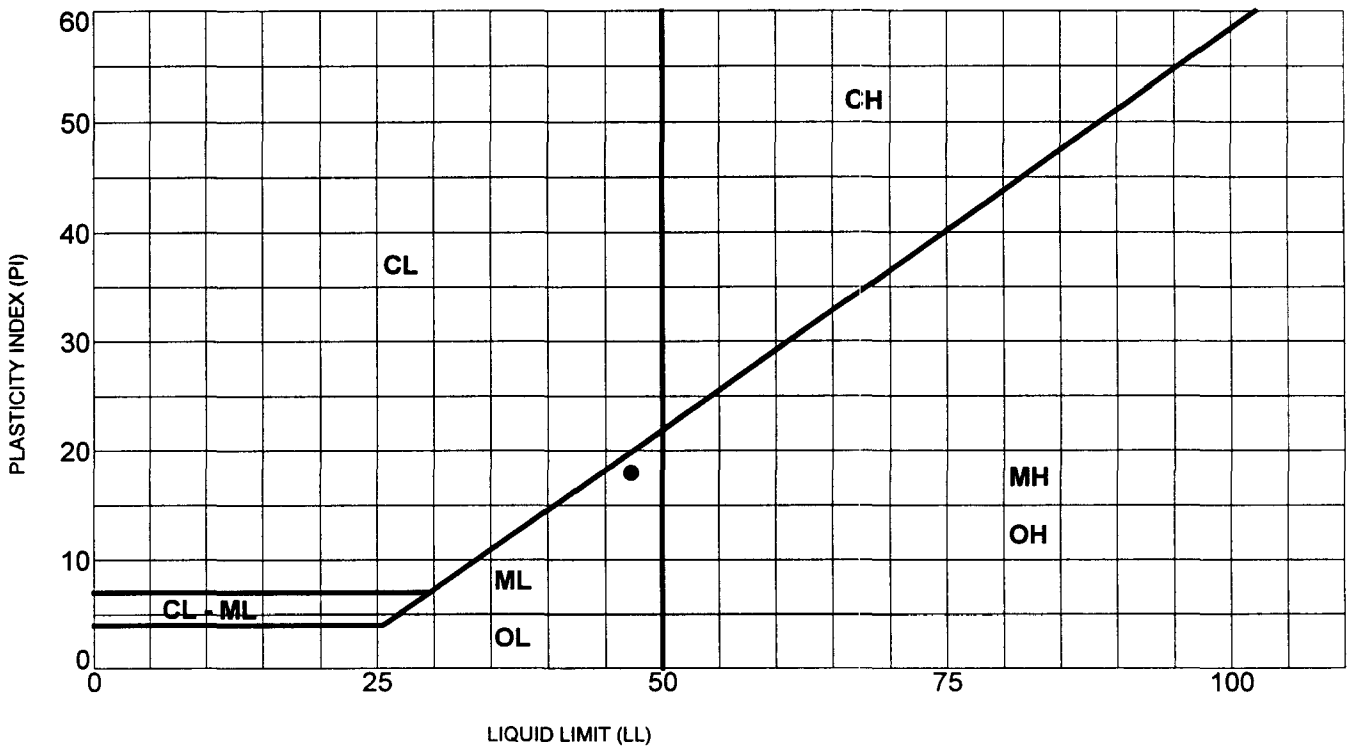
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-15



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-17-271	11.9	47	29	18	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

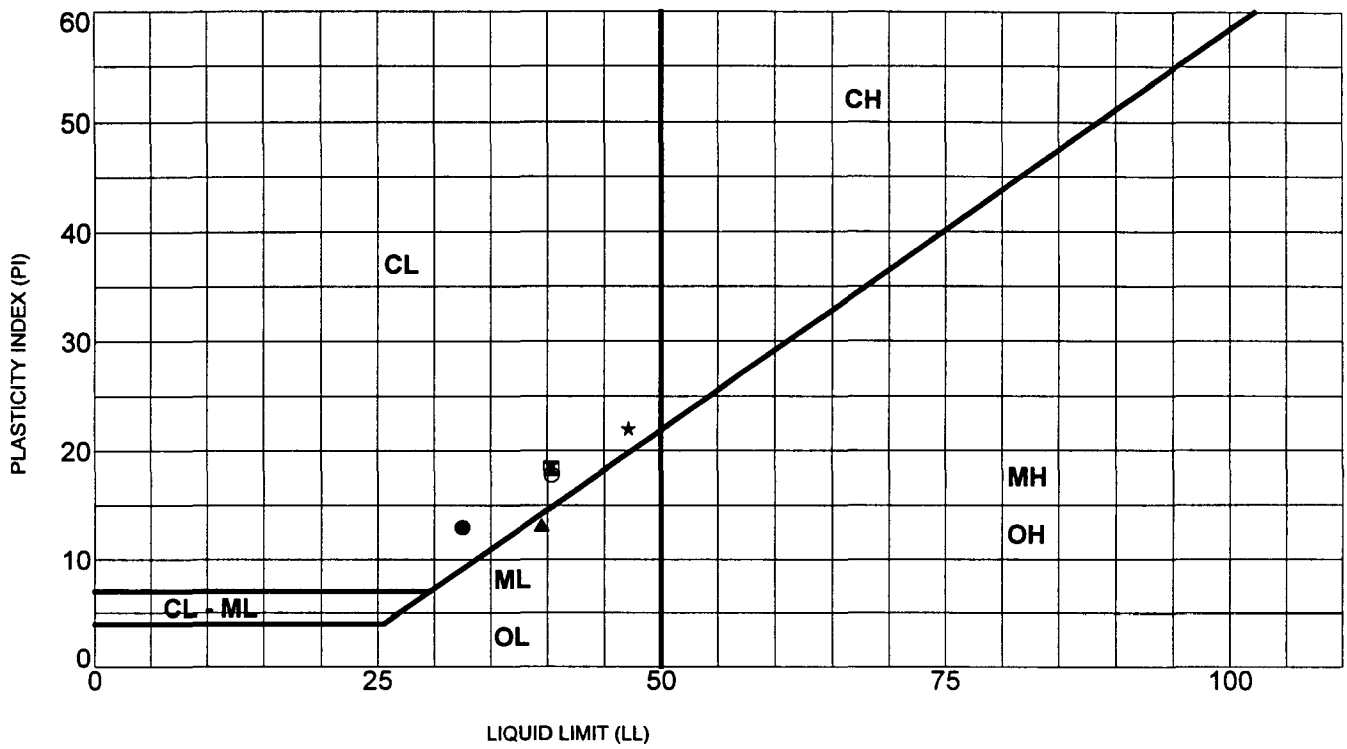
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-16



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-18-272	4.6	32	20	13	Lean CLAY (CL)
⊠	SB-18-272	10.7	40	22	18	Lean CLAY (CL)
▲	SB-18-272	13.7	39	26	13	SILT (ML)
★	SB-18-272	36.6	47	25	22	Lean CLAY (CL)
○	SB-18-272	48.8	40	23	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

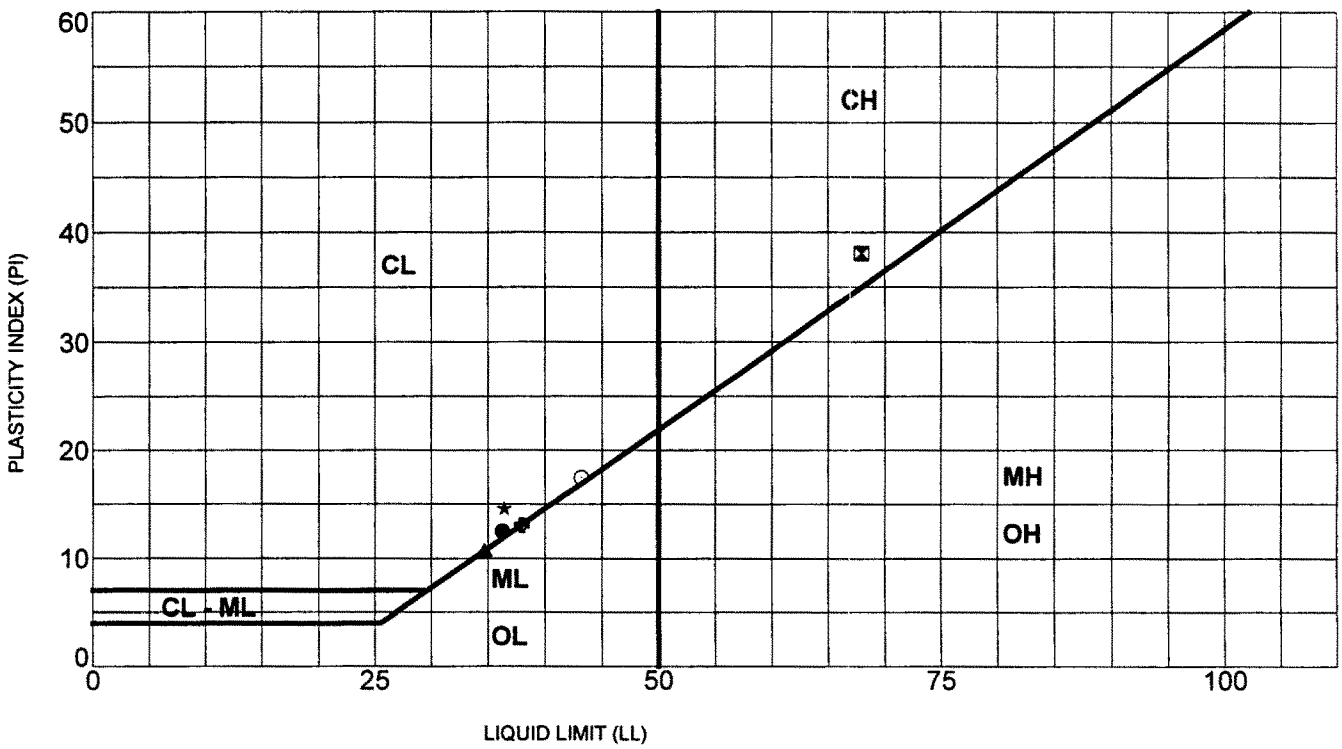
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-17



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-19-274	15.2	36	24	12	Lean CLAY (CL)
⊠	SB-19-274	25.9	68	30	38	Clayey SAND (SC)
▲	SB-19-276	18.3	35	24	11	Lean CLAY (CL)
★	SB-19-276	24.4	36	22	15	Lean CLAY (CL)
○	SB-19-279	1.4	43	26	17	Lean CLAY (CL)
✿	SB-19-279	6.7	38	25	13	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

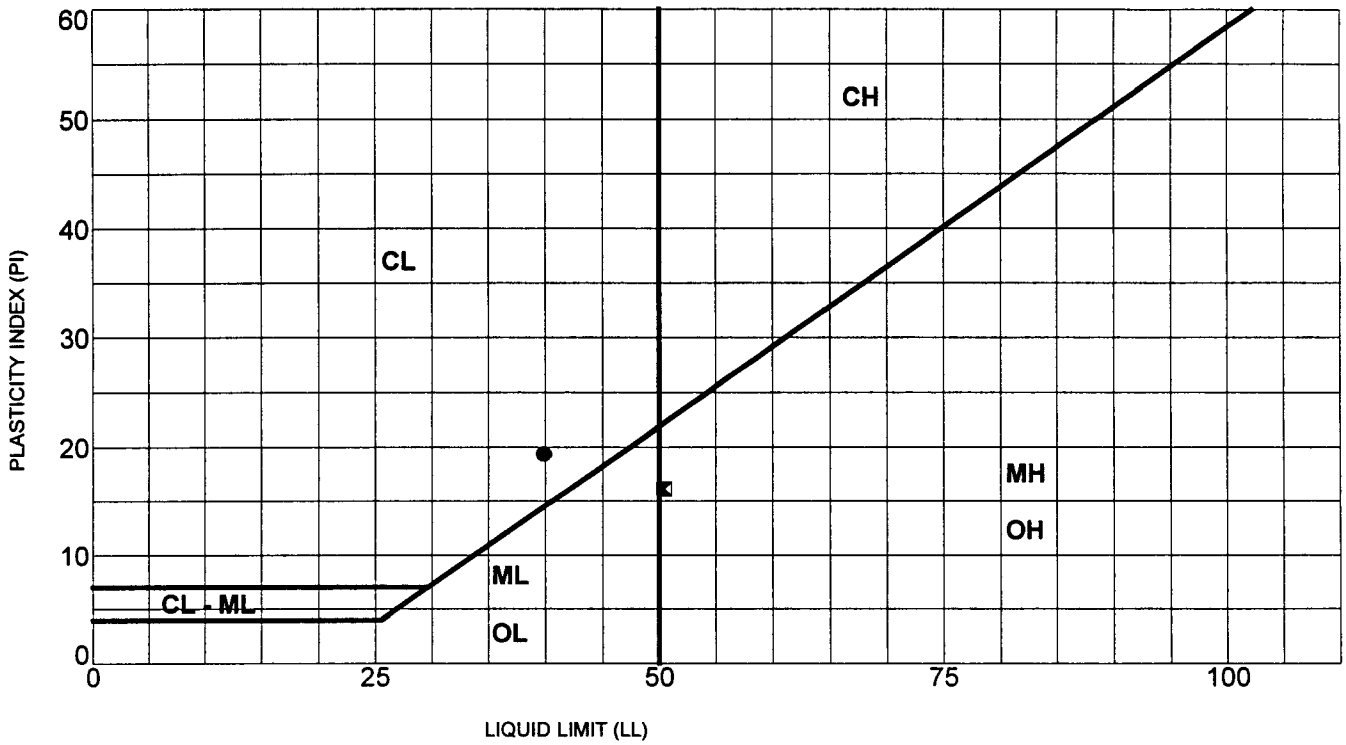
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-18



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-19-279	10.7	40	20	19	Lean CLAY (CL)
⊠	SB-19-281	15.8	50	34	16	Elastic SILT (MH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

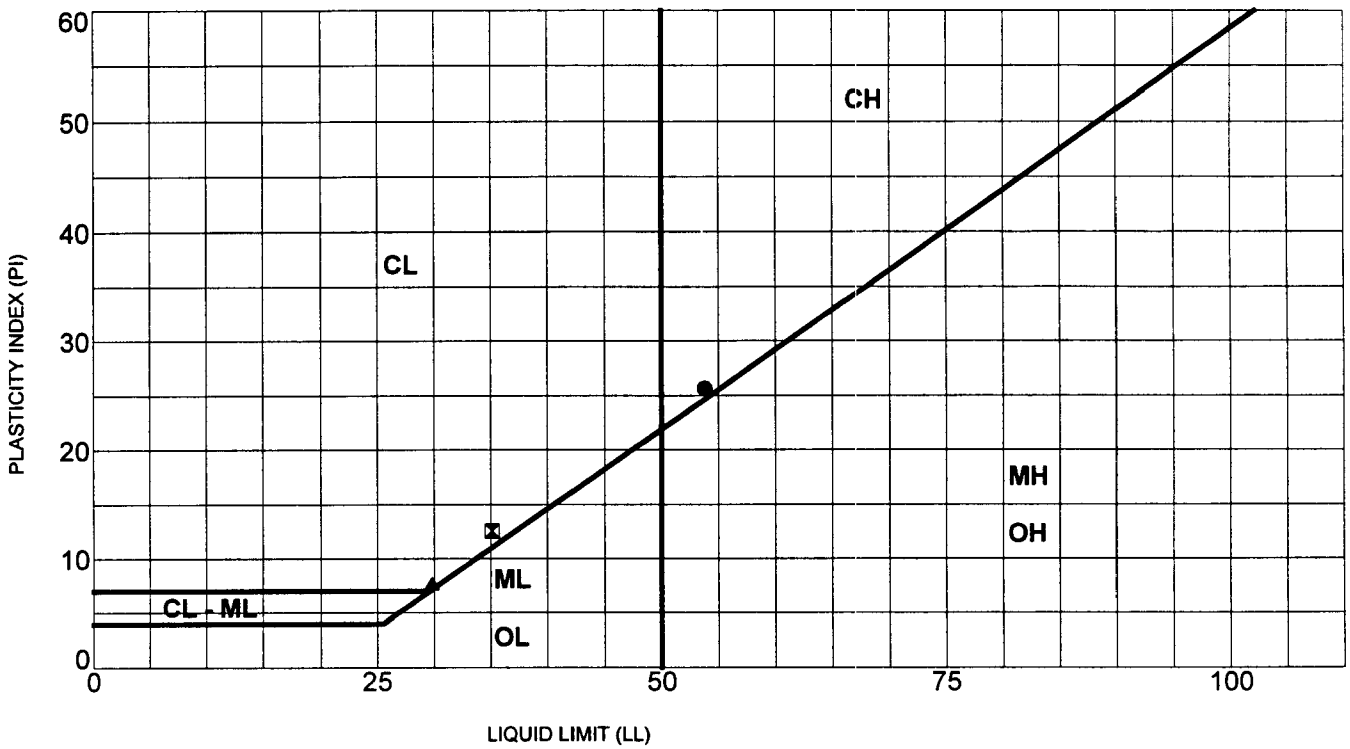
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-19



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-21-282	7.6	54	28	26	Fat CLAY (CH)
⊠	SB-21-282	16.8	35	23	13	Lean CLAY (CL)
▲	SB-21-284	21.3	30	22	8	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

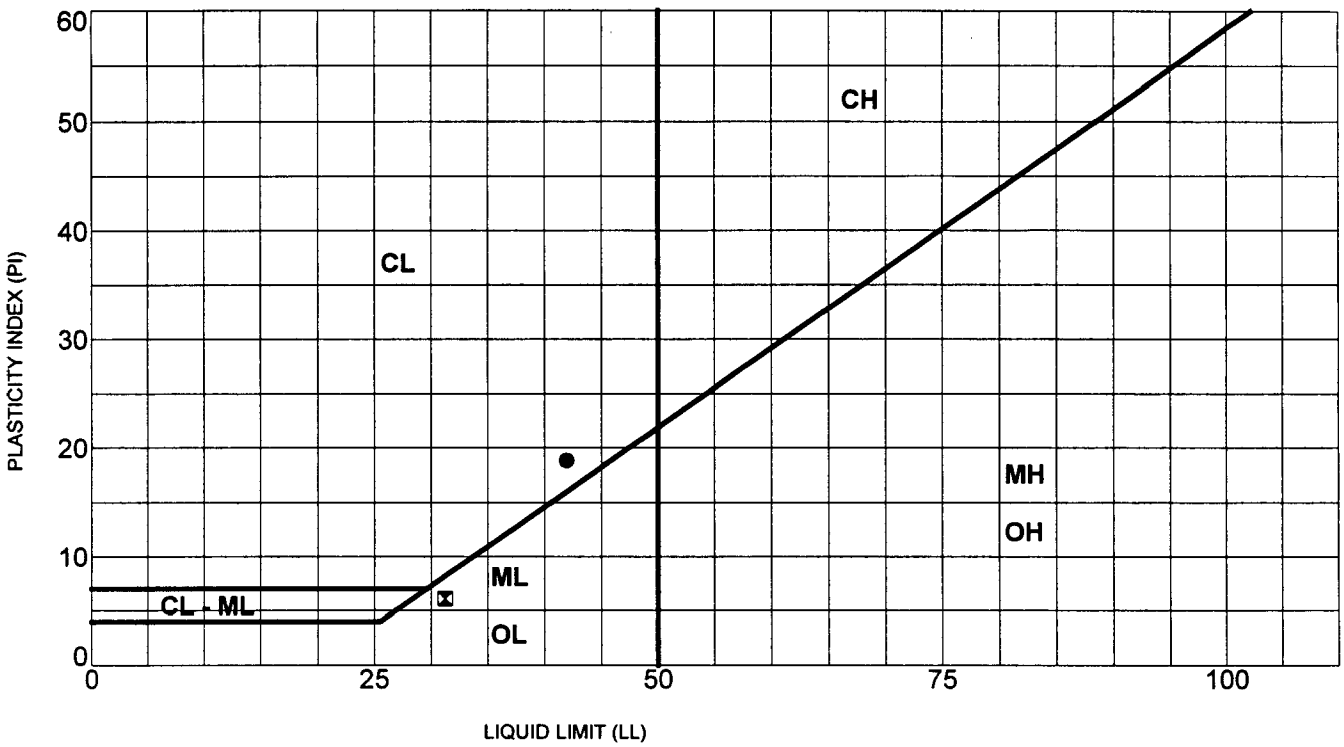
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-20



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-22-285	13.7	42	23	19	Sandy Lean CLAY (CL)
⊠	SB-22-288	7.6	31	25	6	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

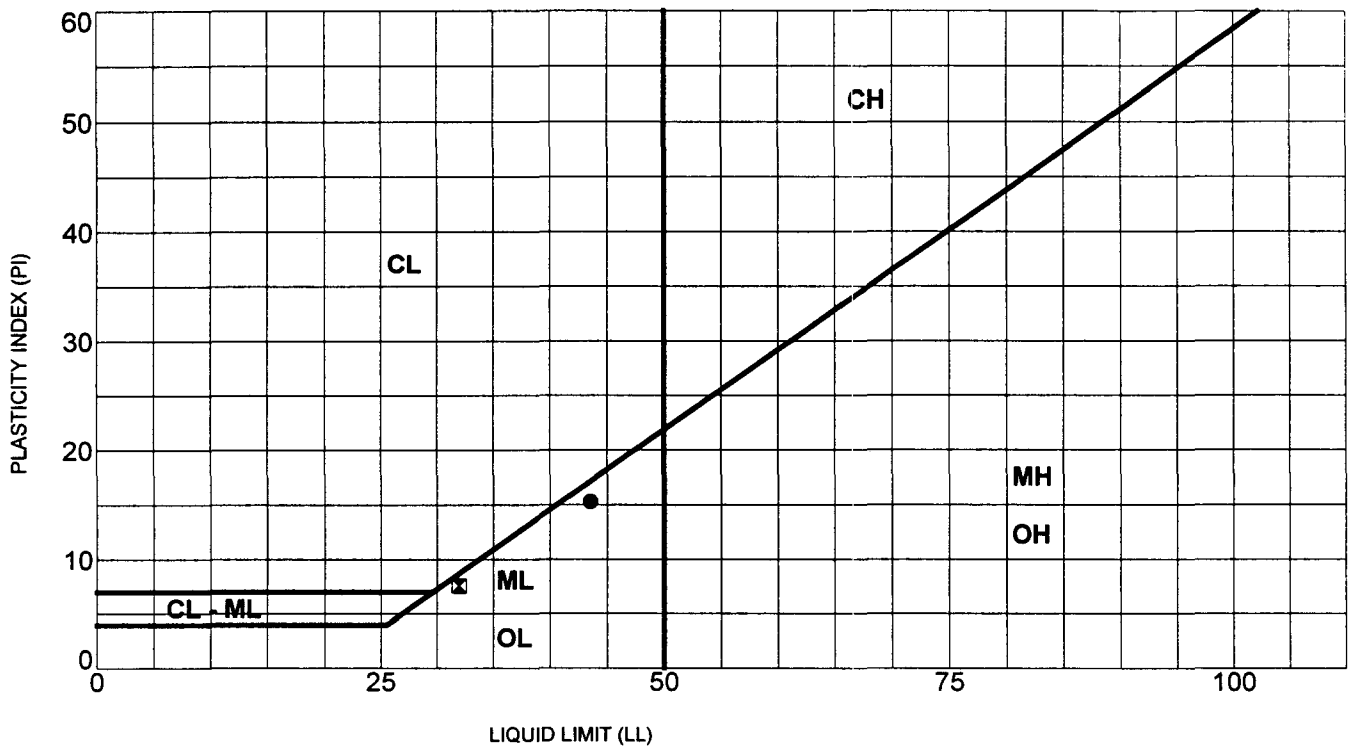
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-21



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-23-289	1.5	44	28	15	SILT (ML)
⊠	SB-23-290C	9.1	32	24	8	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

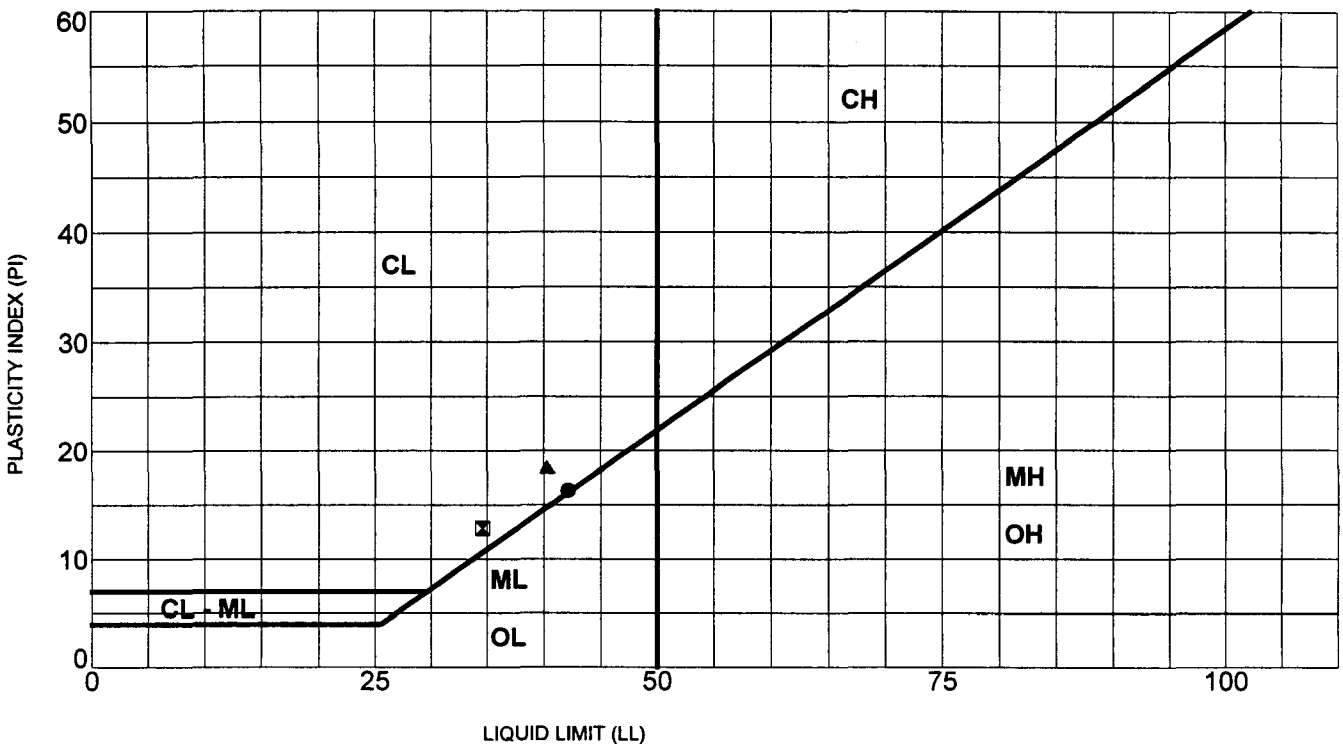
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-22



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-25-334	3.0	42	26	16	Lean CLAY (CL)
⊠	SB-25-334	9.1	35	22	13	Lean CLAY (CL)
▲	SB-26-337	7.6	40	22	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

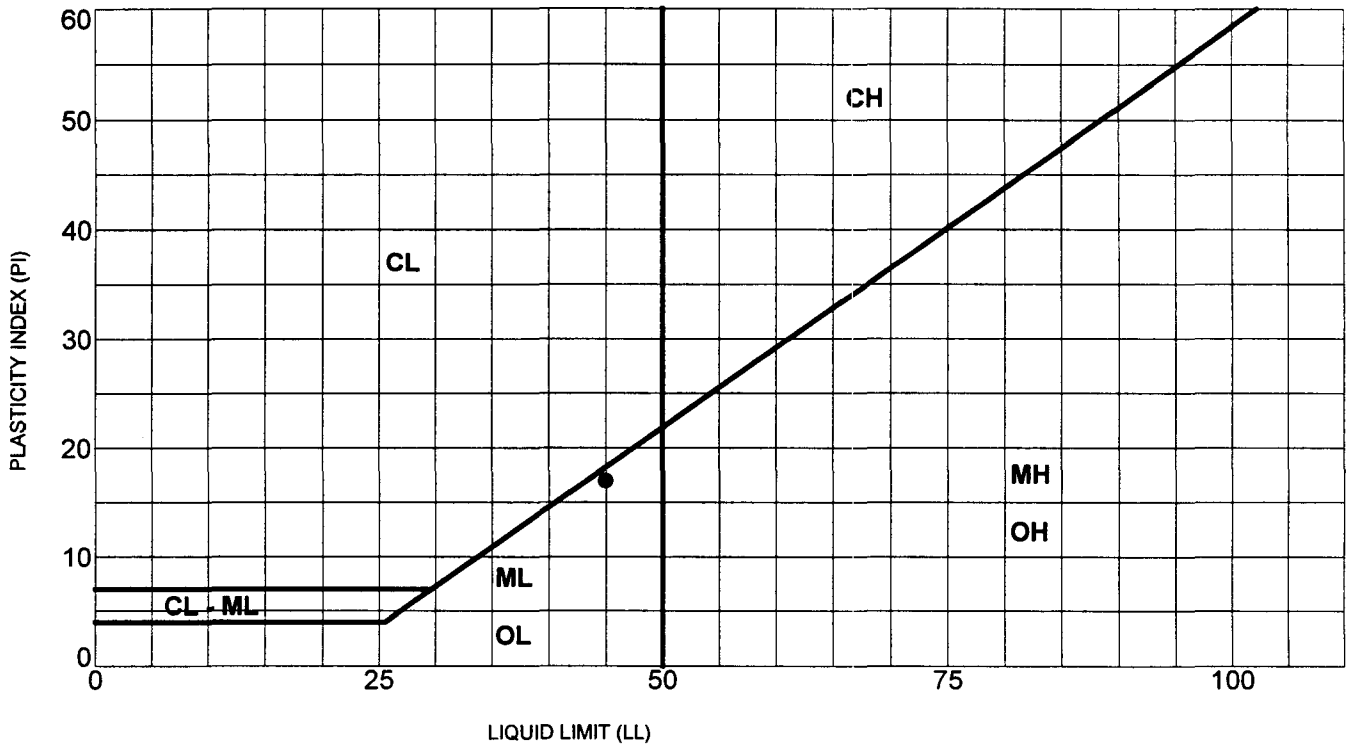
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-23



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-26-339	3.0	45	28	17	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

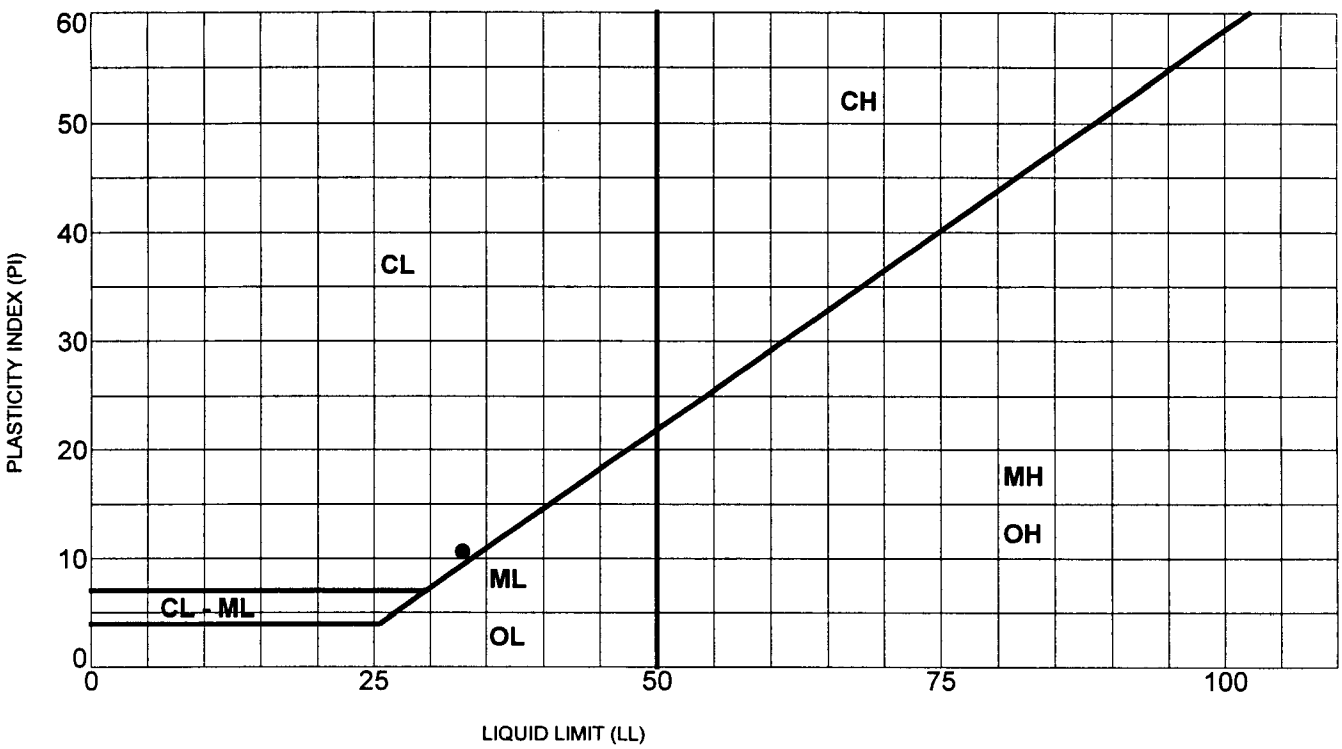
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-24



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-27-345	6.1	33	22	11	Lean CLAY with sand (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

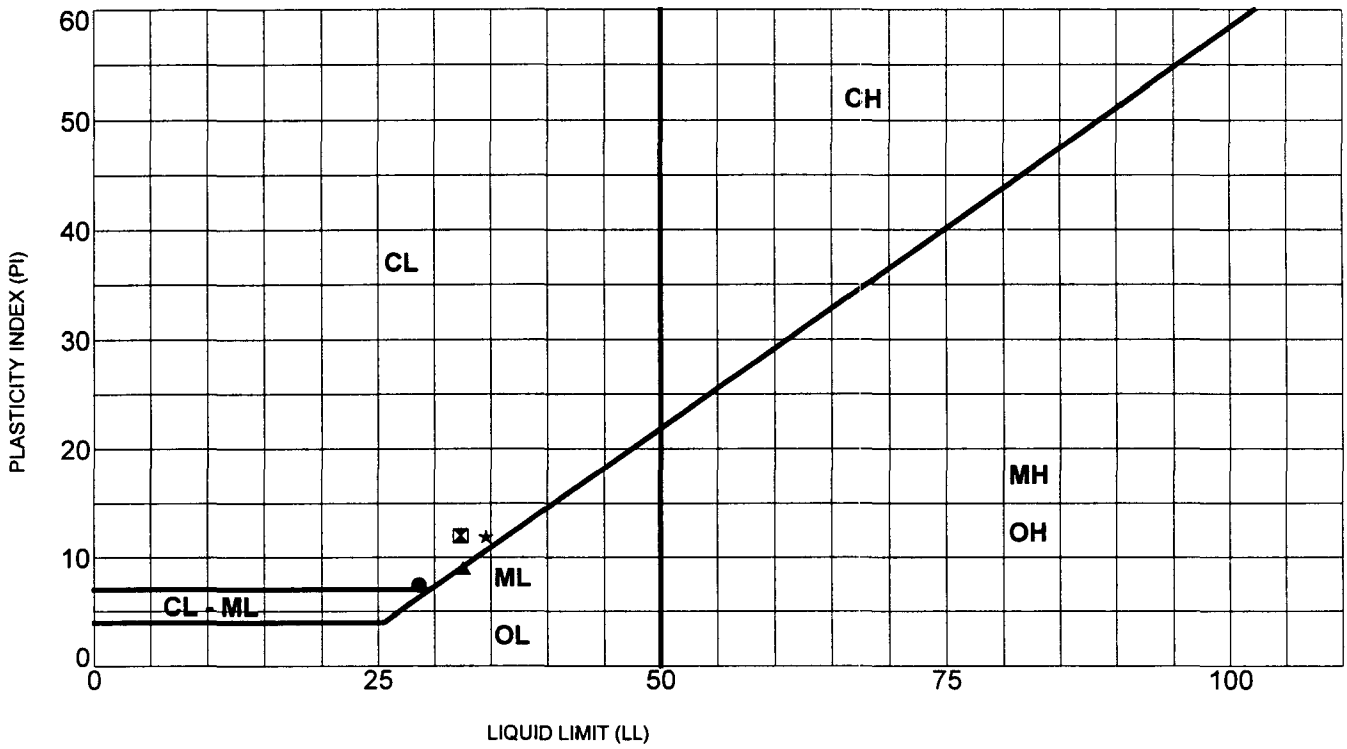
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-25



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-28-346	3.0	29	21	7	Sandy Lean CLAY (CL)
⊠	SB-28-346	12.2	32	20	12	Lean CLAY (CL)
▲	SB-28-347	6.1	33	24	9	SILT (ML)
★	SB-28-347	12.2	35	23	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

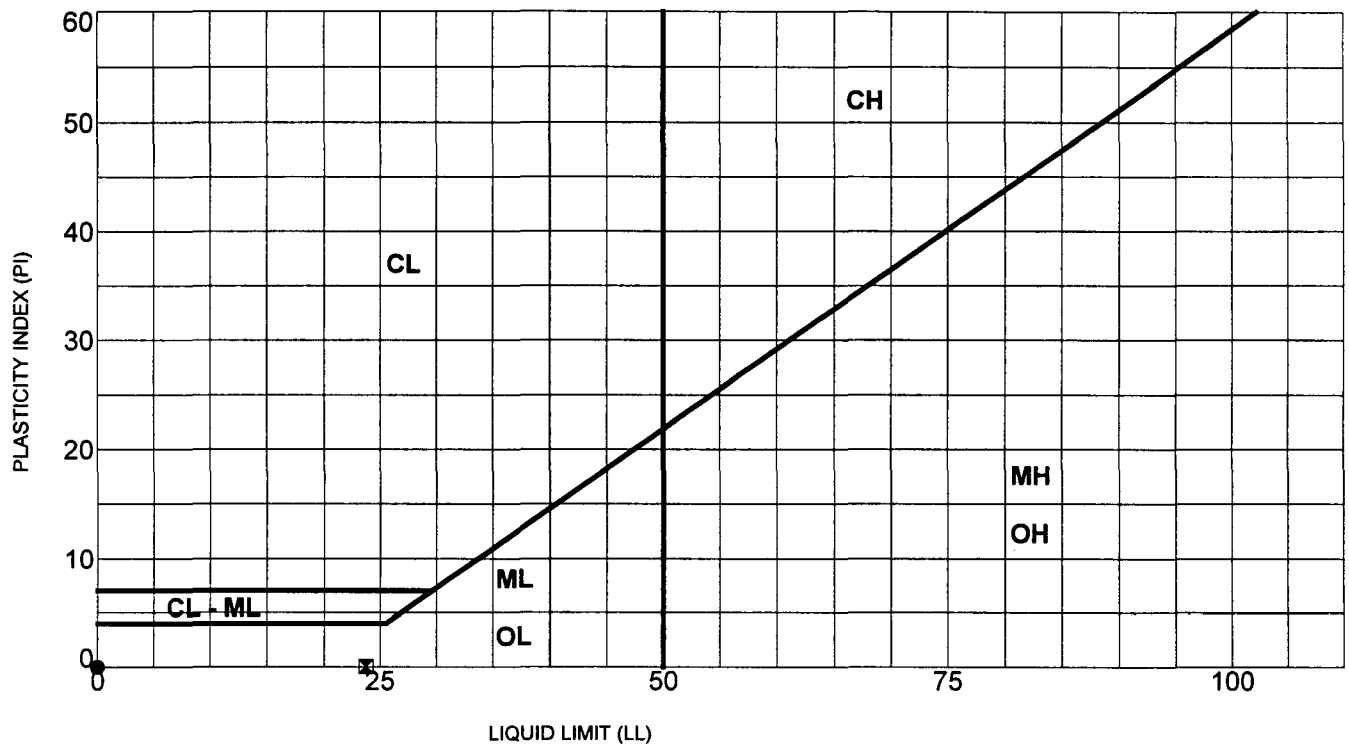
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-26



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-30-351	4.6	NP	NP	NP	SILT with sand (ML)
⊠	SB-30-351	9.1	24	24	NP	SILT with sand (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

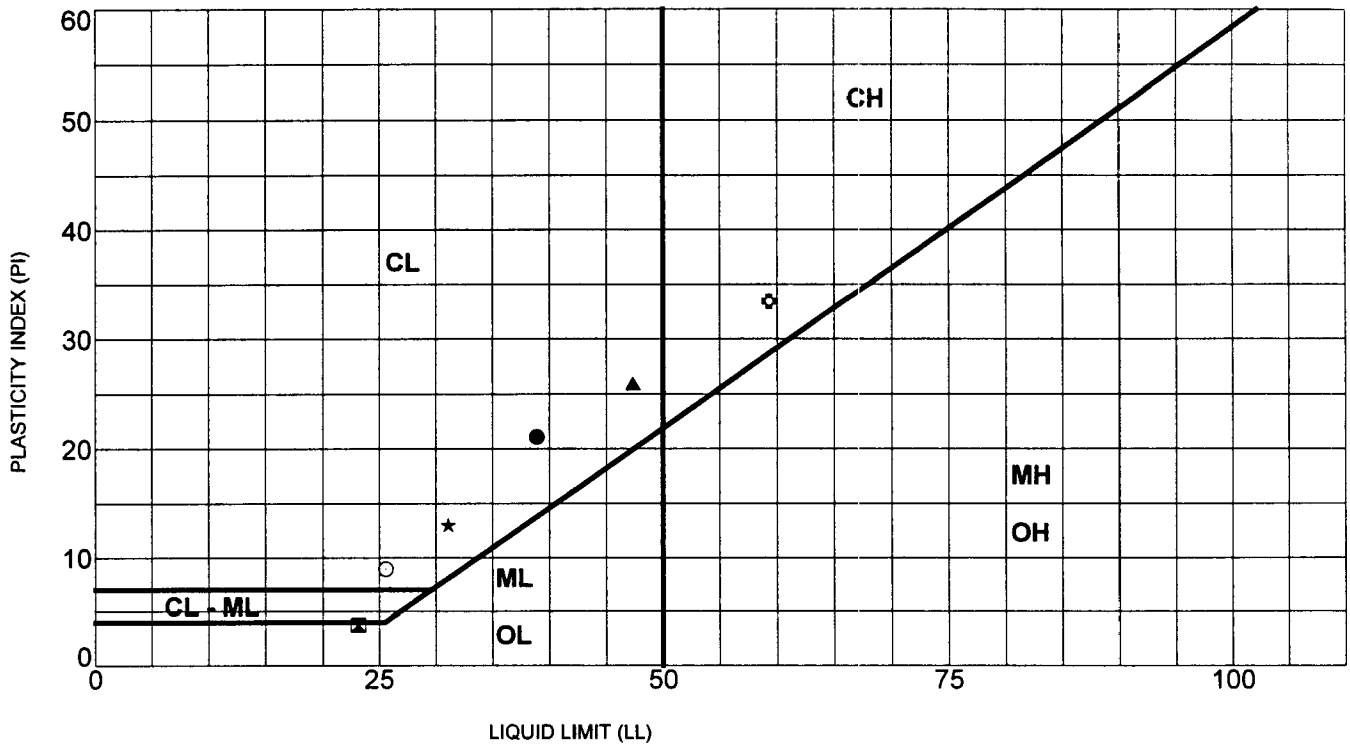
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-27



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-31-353	36.6	39	18	21	Lean CLAY (CL)
⊠	SB-31-353	42.7	23	19	4	SILT (ML)
▲	SB-31-354	4.6	47	21	26	Lean CLAY (CL)
★	SB-31-354	13.4	31	18	13	Lean CLAY with sand (CL)
○	SB-31-354	33.5	26	17	9	Lean CLAY (CL)
✿	SB-31-355	5.9	59	26	33	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

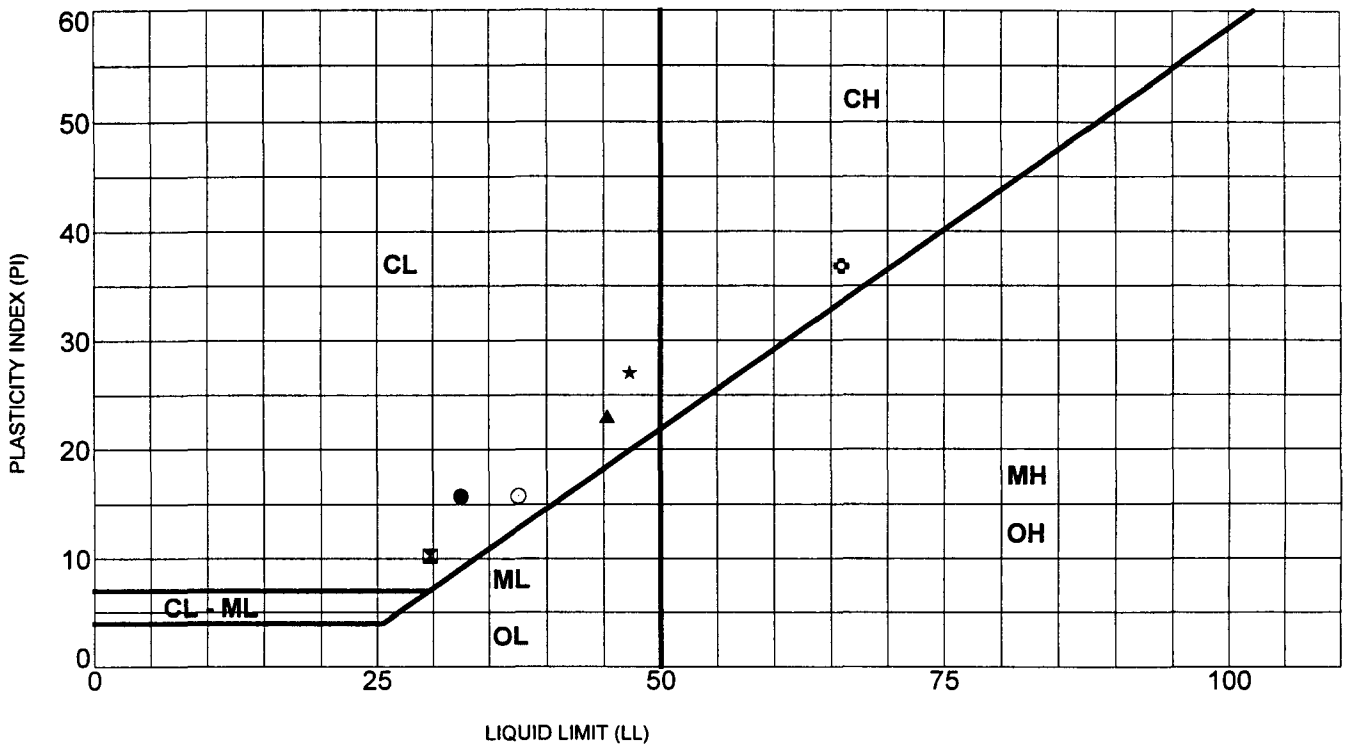
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-28



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-31-355	12.0	32	17	16	Sandy Lean CLAY (CL)
⊠	SB-31-355	24.2	30	19	10	Lean CLAY (CL)
▲	SB-31-355	39.5	45	22	23	Lean CLAY with sand (CL)
★	SB-31-355	42.5	47	20	27	Lean CLAY (CL)
○	SB-31-356	6.1	38	22	16	Lean CLAY (CL)
✿	SB-31-356	18.3	66	29	37	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

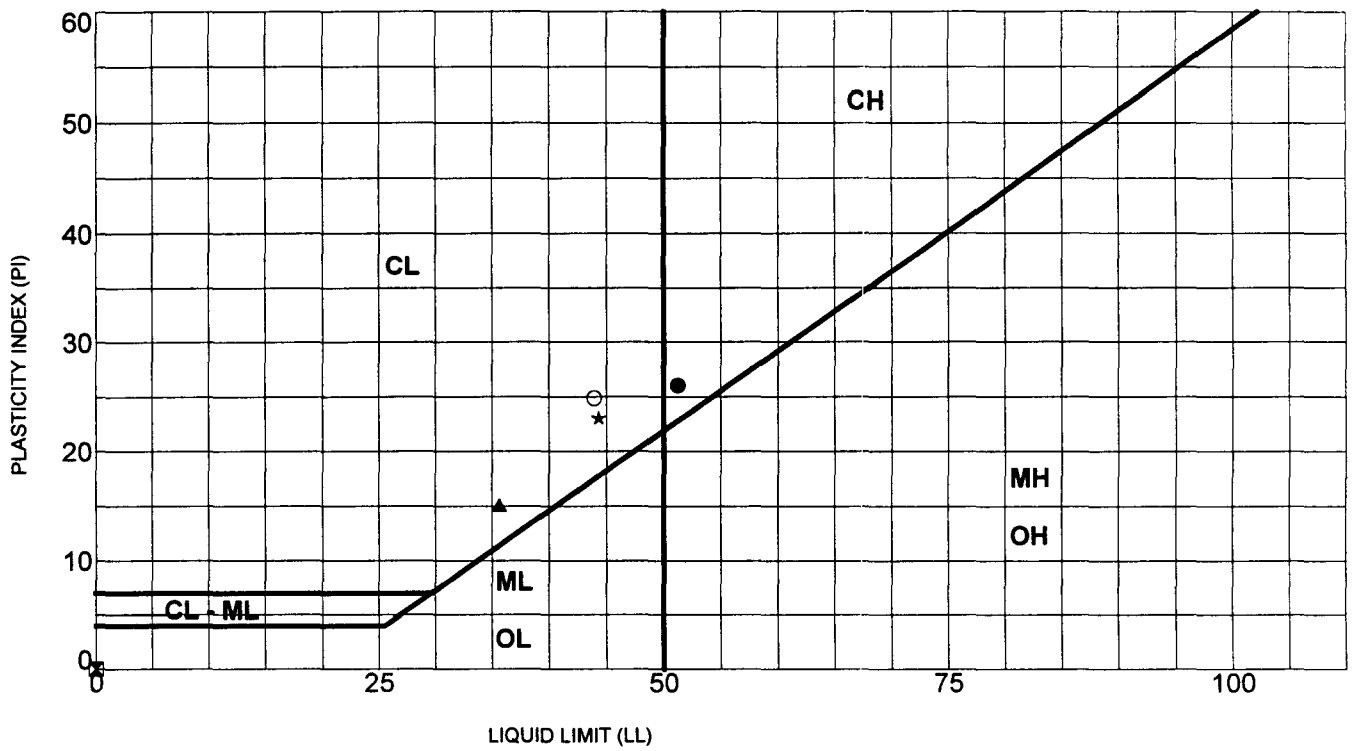
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-29



	Sample	Depth (m)	LL	PL	PI	Description
●	SB-32-357	3.0	51	25	26	Fat CLAY (CH)
⊠	SB-32-357	9.1	NP	NP	NP	Sandy SILT (ML)
▲	SB-32-357	15.2	36	21	15	Lean CLAY (CL)
★	SB-32-357	21.3	44	21	23	Lean CLAY (CL)
○	SB-32-357	38.1	44	19	25	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

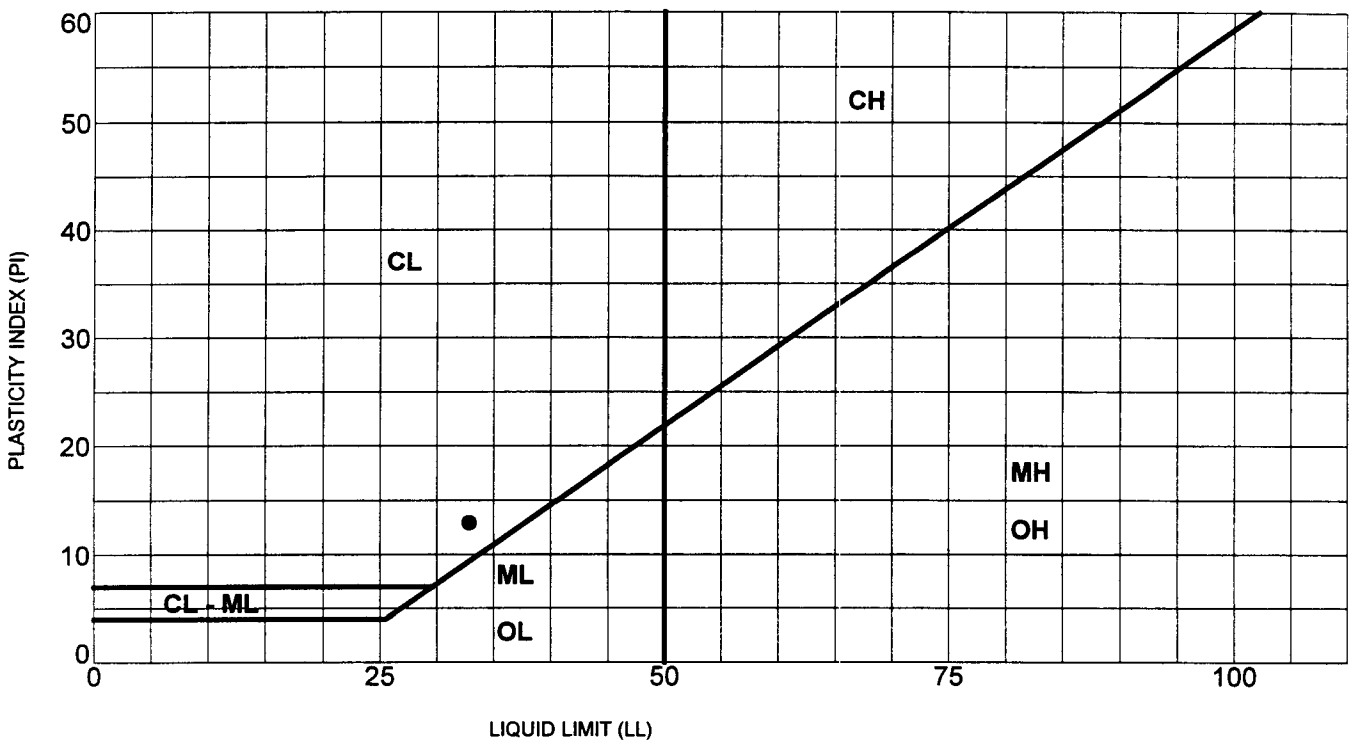
PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-30

(This page left blank intentionally.)



	Sample	Depth (m)	LL	PL	PI	Description
●	WB- 1-240	12.8	33	20	13	Poorly graded SAND with silt (SP-SM)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

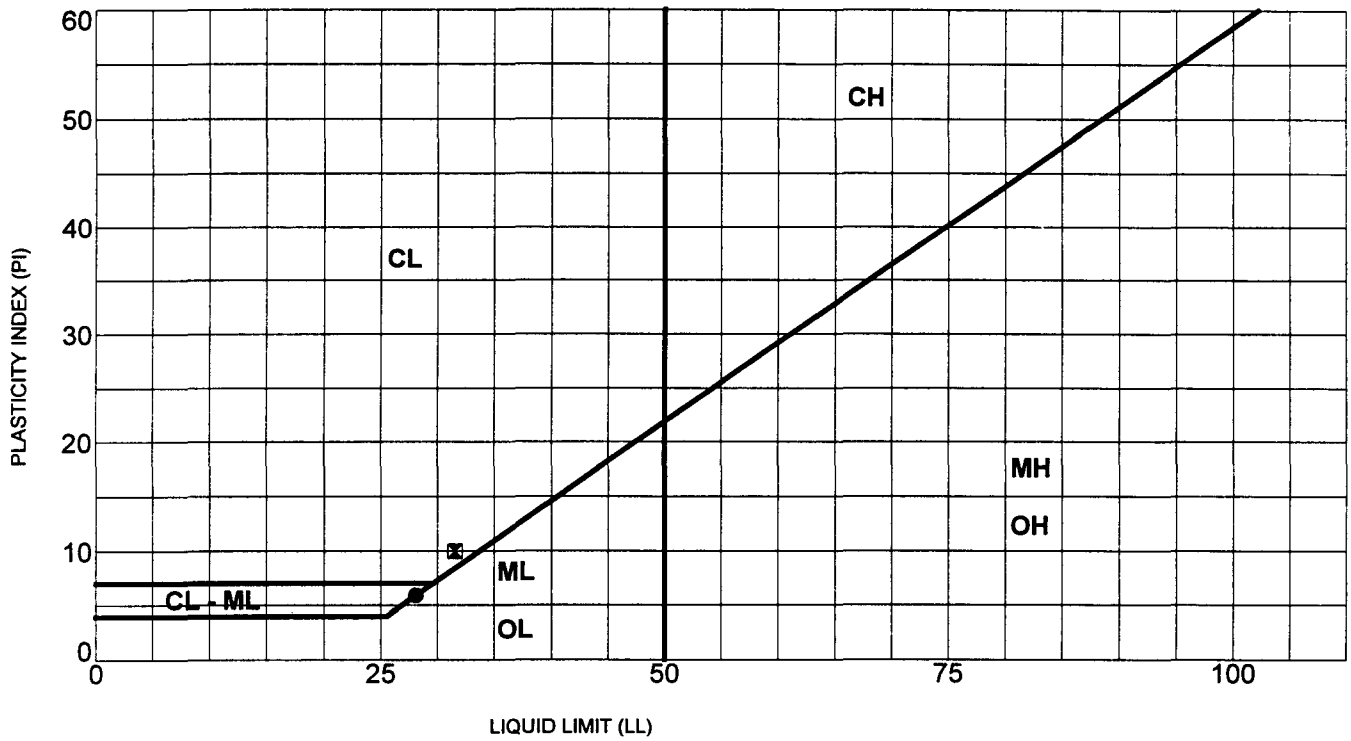
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-32



	Sample	Depth (m)	LL	PL	PI	Description
●	WB- 2-241	7.6	28	22	6	SILT (ML)
⧗	WB- 2-241	10.7	32	22	10	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

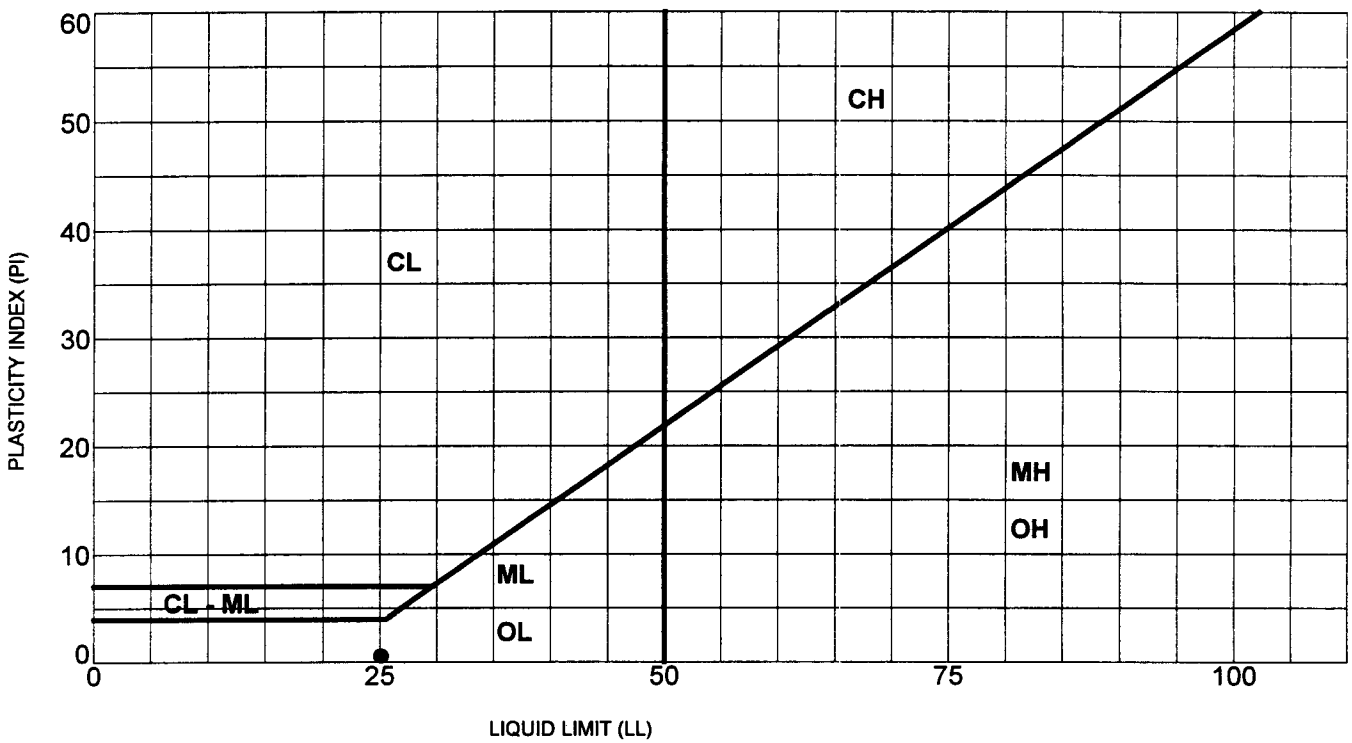
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-33



	Sample	Depth (m)	LL	PL	PI	Description
●	WB- 3-242	6.1	25	25	1	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

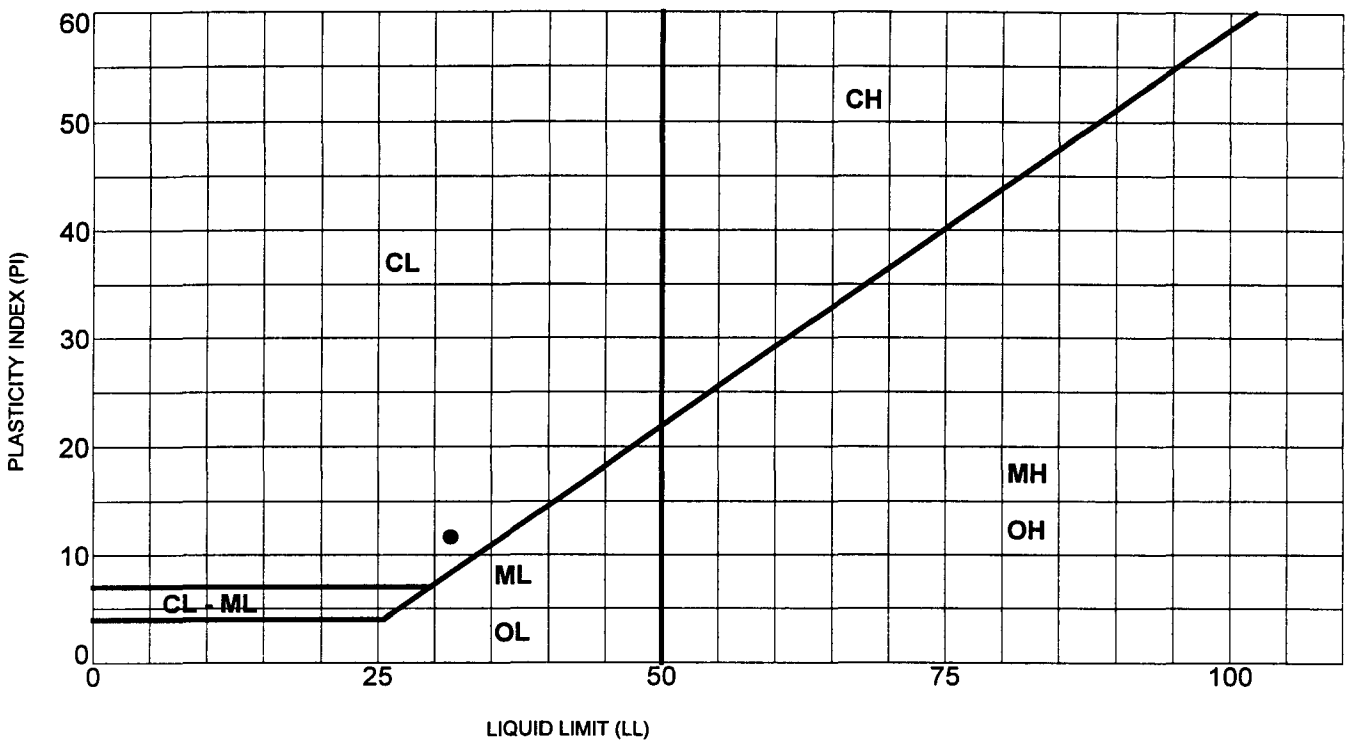
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-34



	Sample	Depth (m)	LL	PL	PI	Description
●	WB- 4-239	12.2	31	20	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

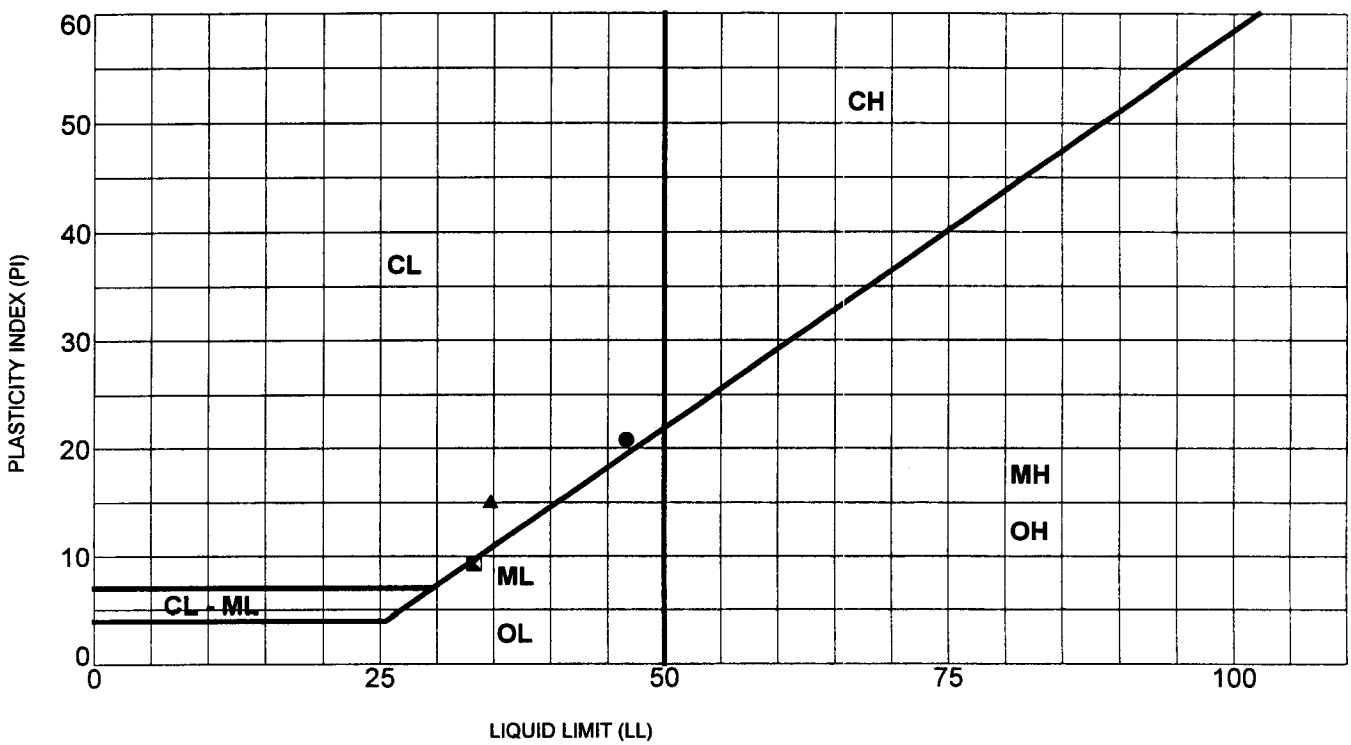
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-35



	Sample	Depth (m)	LL	PL	PI	Description
●	WB- 9-226	3.0	47	26	21	Lean CLAY (CL)
⊠	WB- 9-228	3.0	33	24	9	SILT (ML)
▲	WB- 9-231	7.6	35	20	15	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

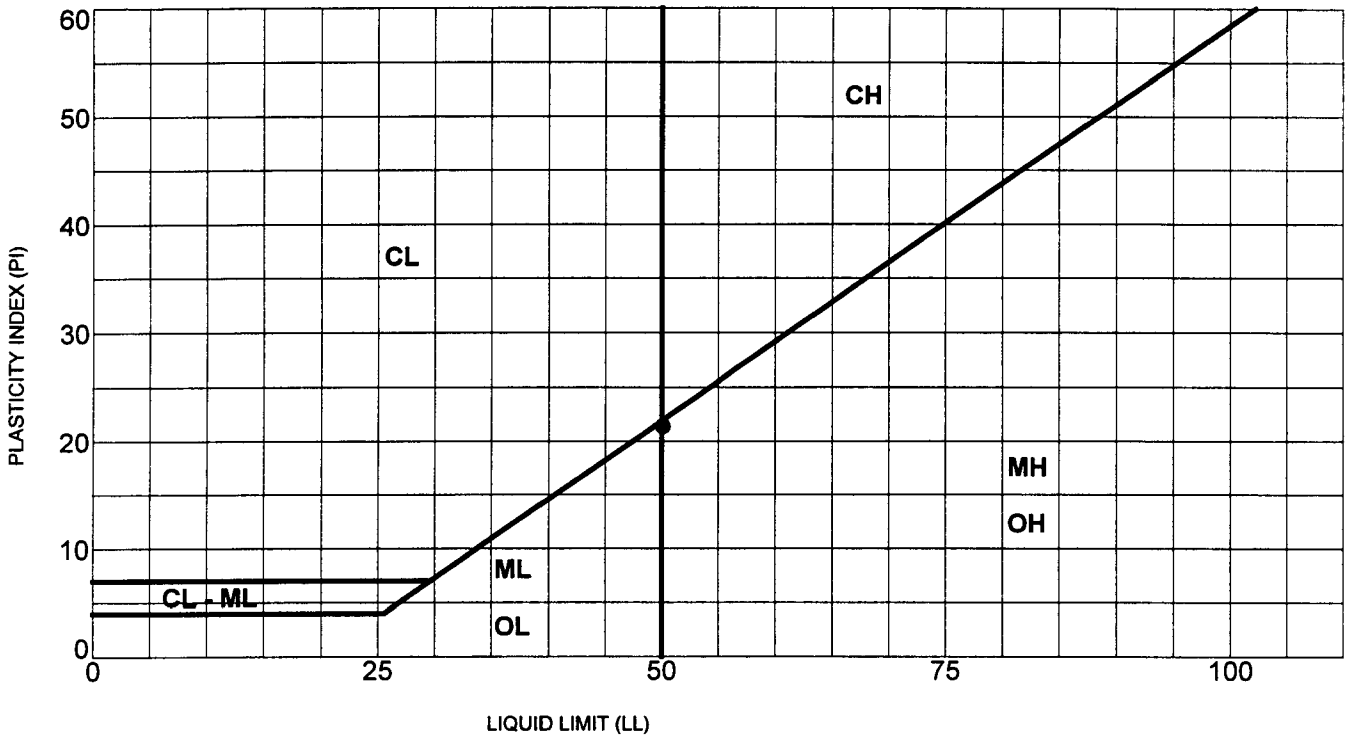
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-36



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-10-233	3.0	50	29	21	Elastic SILT (MH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

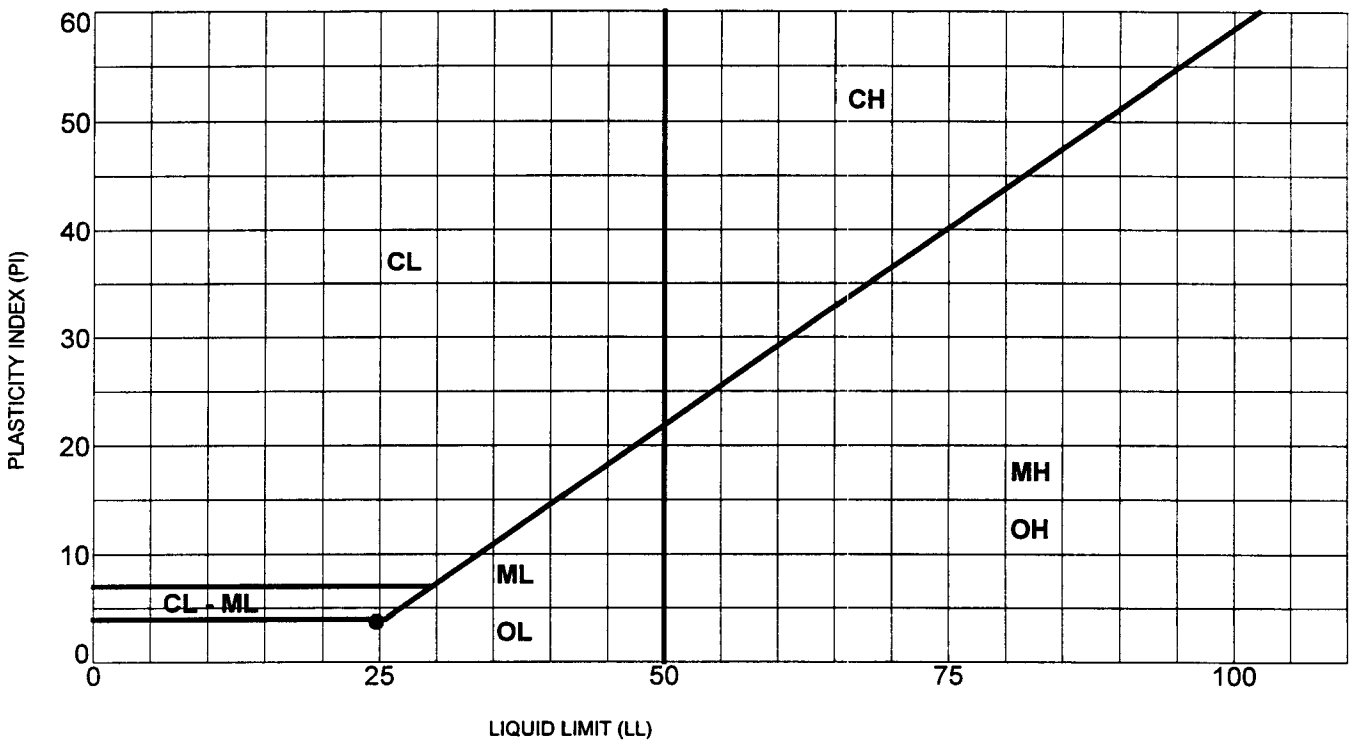
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-37



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-14-238	4.6	25	21	4	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

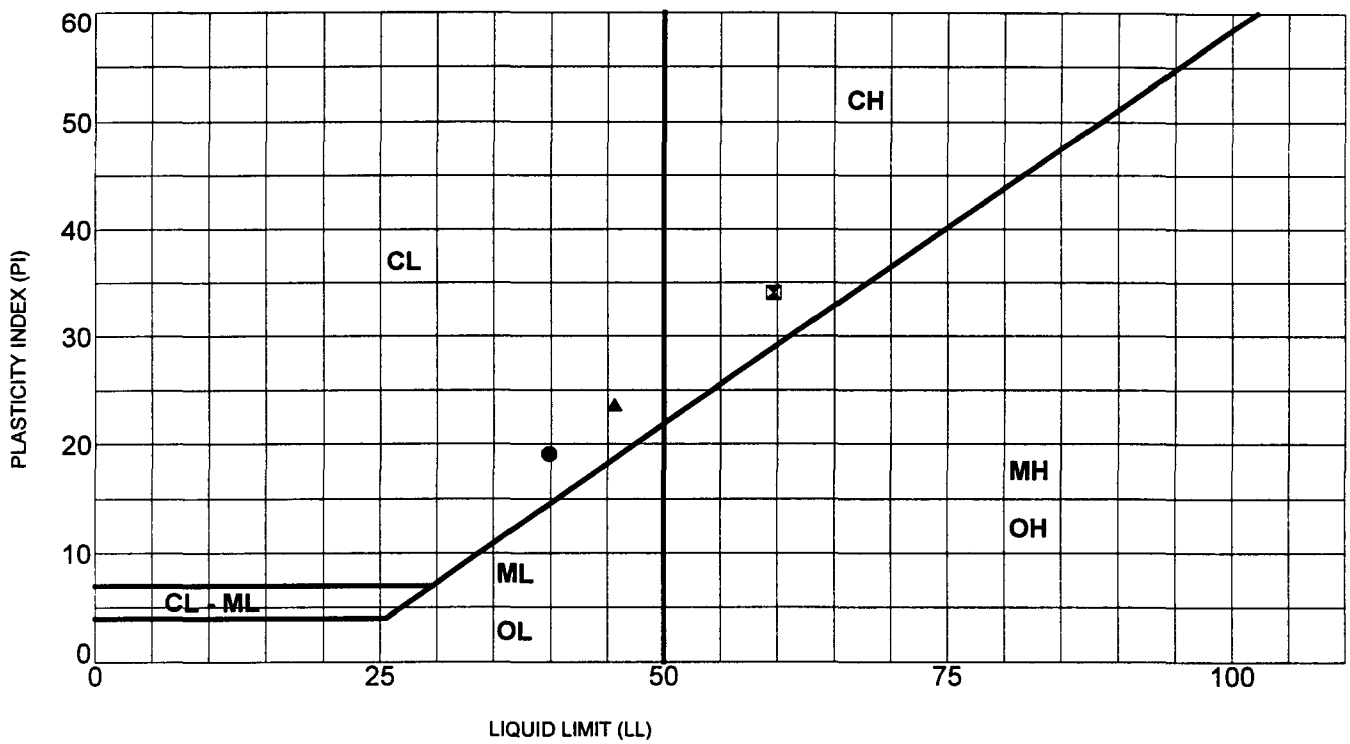
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-38



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-15-219b	10.7	40	21	19	Lean CLAY (CL)
⧗	WB-15-219b	25.9	60	26	34	Fat CLAY (CH)
▲	WB-15-219b	34.4	46	22	24	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

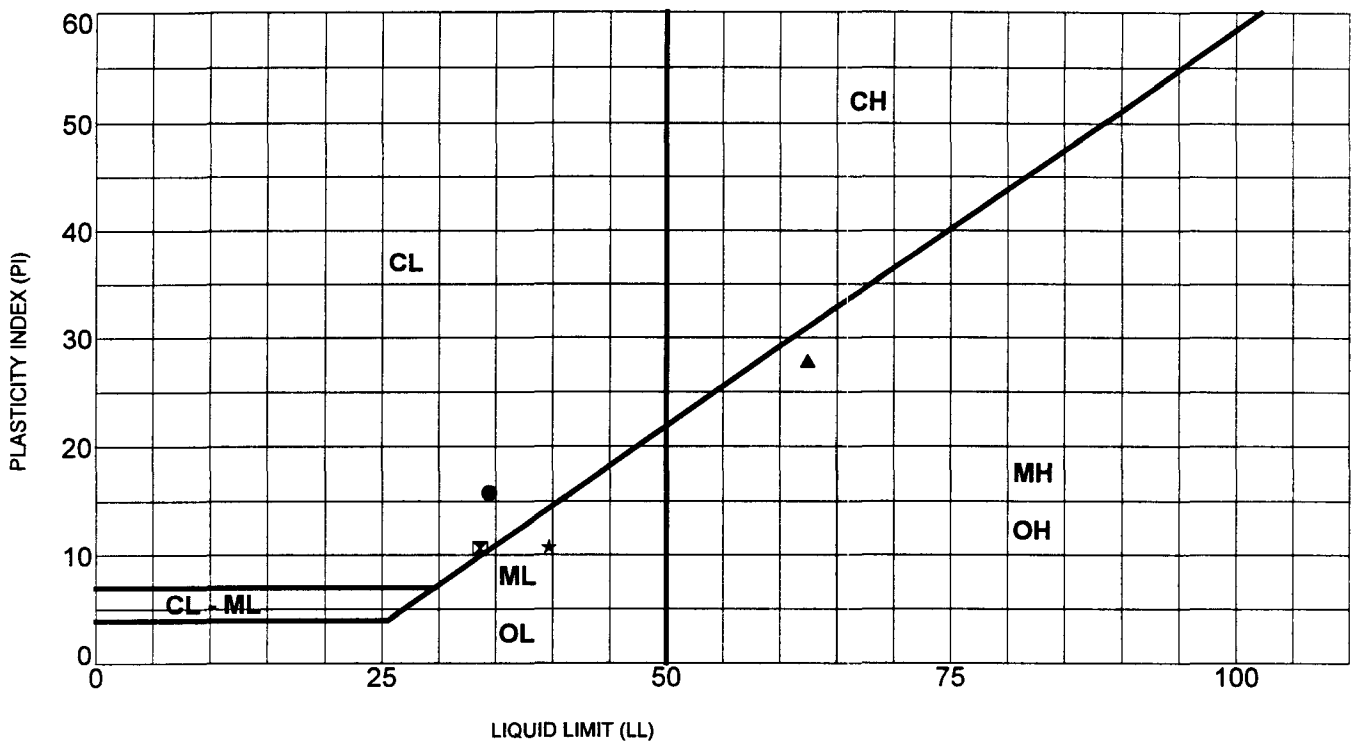
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-39



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-16-222b	3.0	34	19	16	Lean CLAY (CL)
⧗	WB-16-222b	6.1	34	23	11	Lean CLAY with sand (CL)
▲	WB-16-222b	10.7	62	35	28	Elastic SILT (MH)
★	WB-16-224	12.2	40	29	11	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

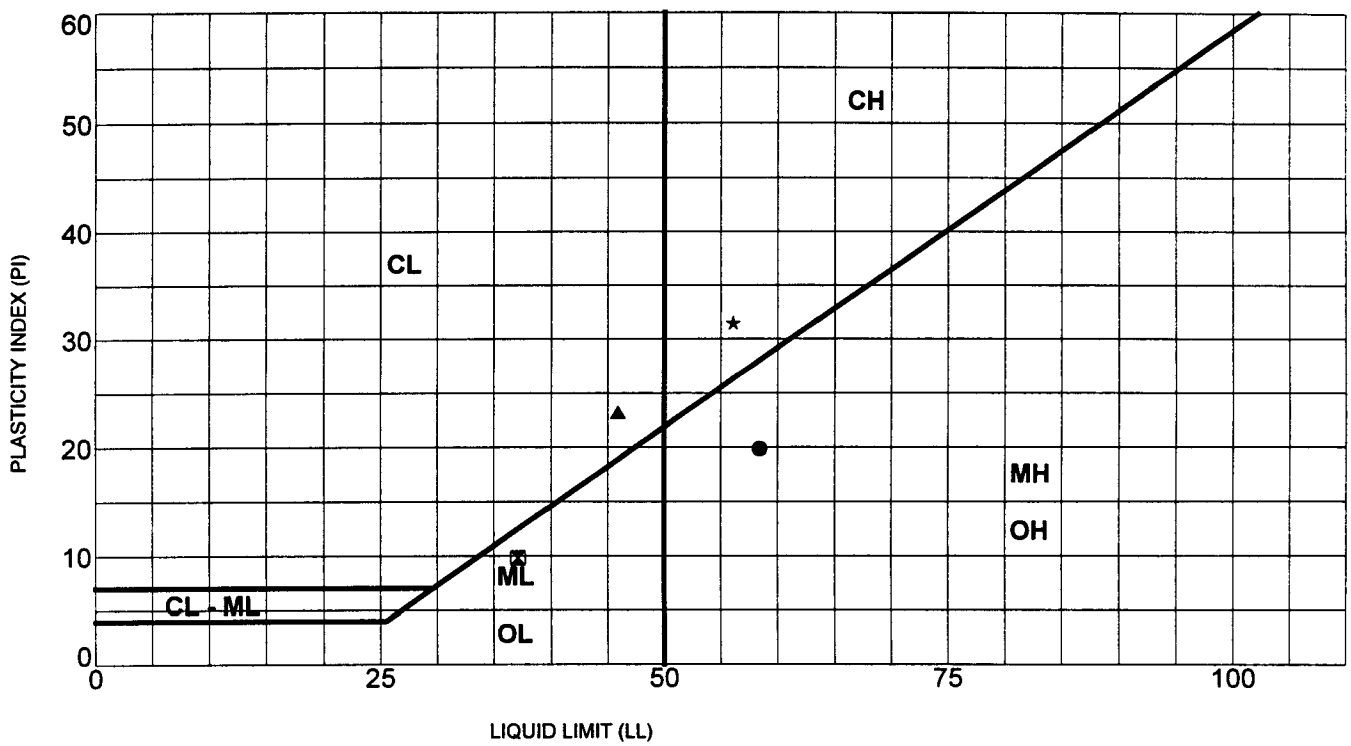
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-40



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-17-213b	10.7	58	39	20	Elastic SILT (MH)
⊠	WB-17-213b	27.4	37	27	10	SILT (ML)
▲	WB-17-215	1.5	46	23	23	Lean CLAY (CL)
★	WB-17-215	7.6	56	25	31	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

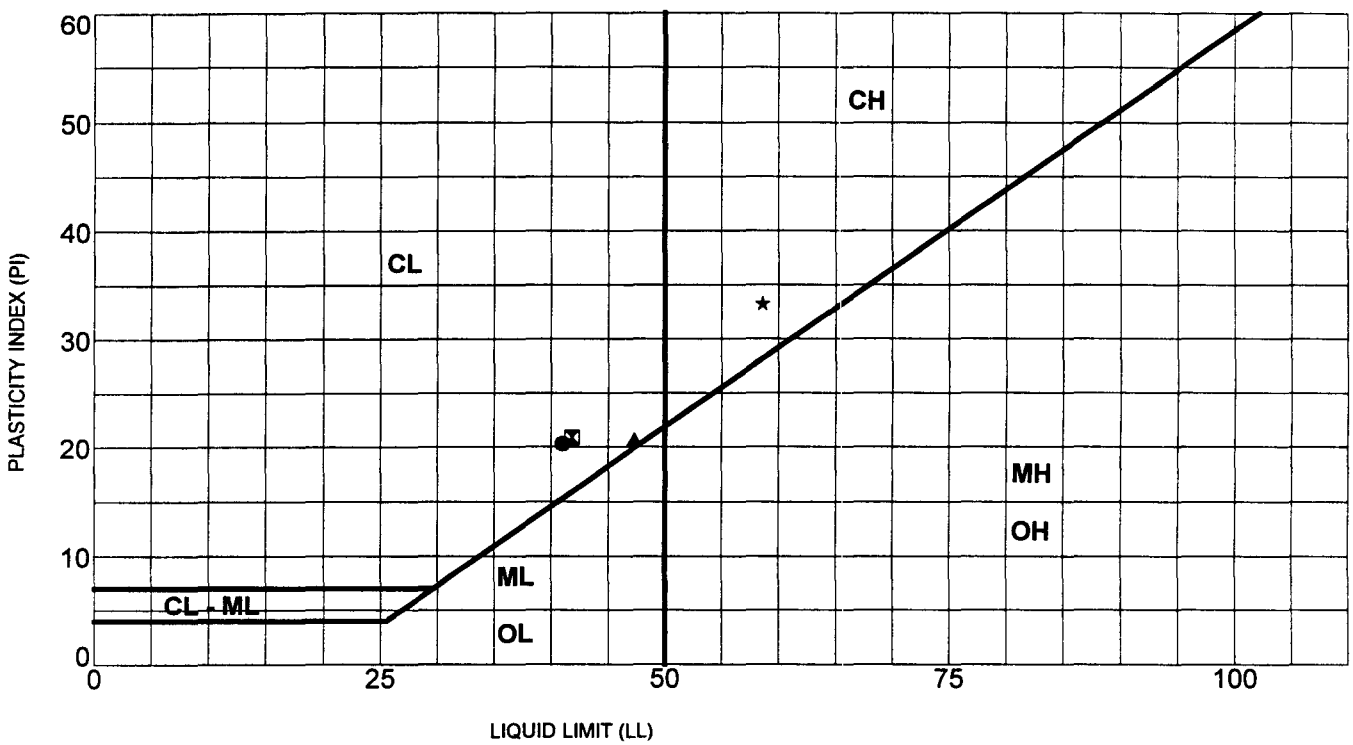
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-41



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-18-216	9.1	41	21	20	Lean CLAY (CL)
⊠	WB-18-218	4.6	42	21	21	Lean CLAY (CL)
▲	WB-18-218	7.6	47	27	21	Lean CLAY (CL)
★	WB-18-218	13.7	59	25	33	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

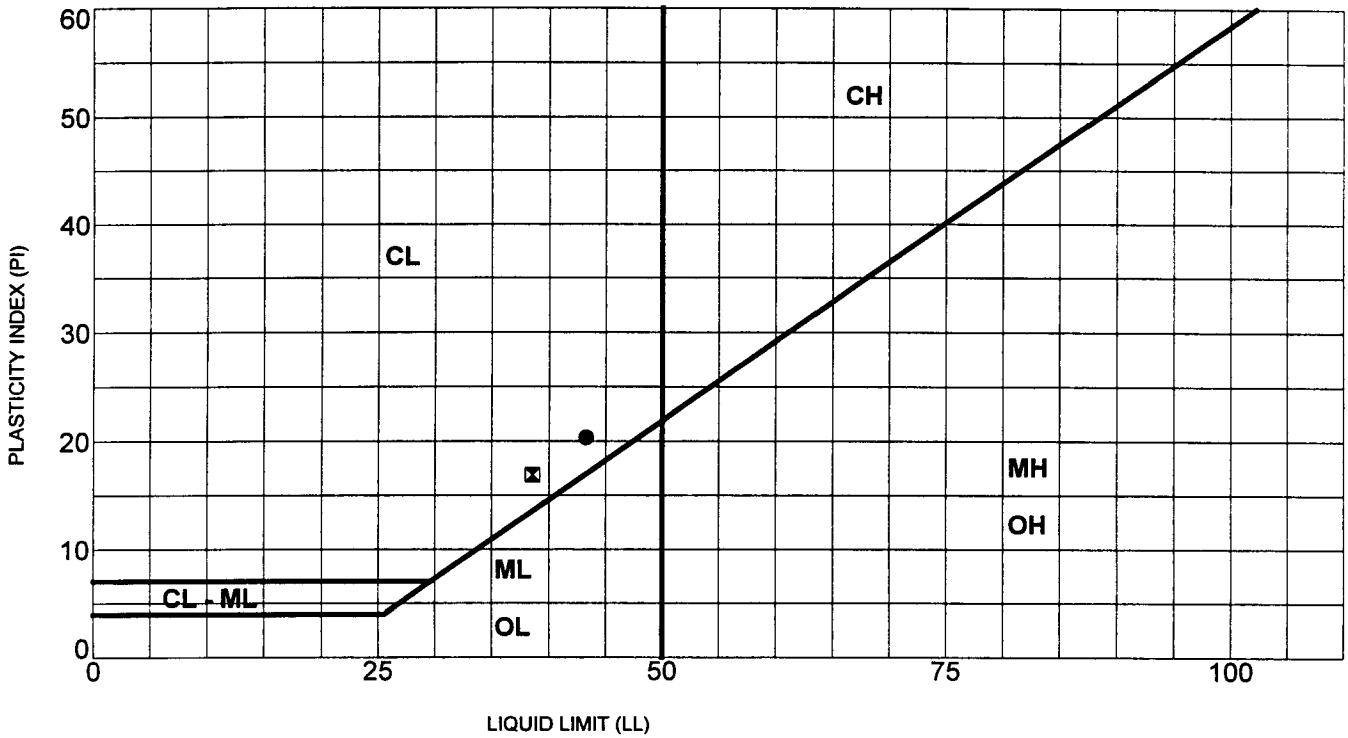
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-42



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-19-212	6.1	43	23	20	Lean CLAY (CL)
⊠	WB-19-212	9.1	39	22	17	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

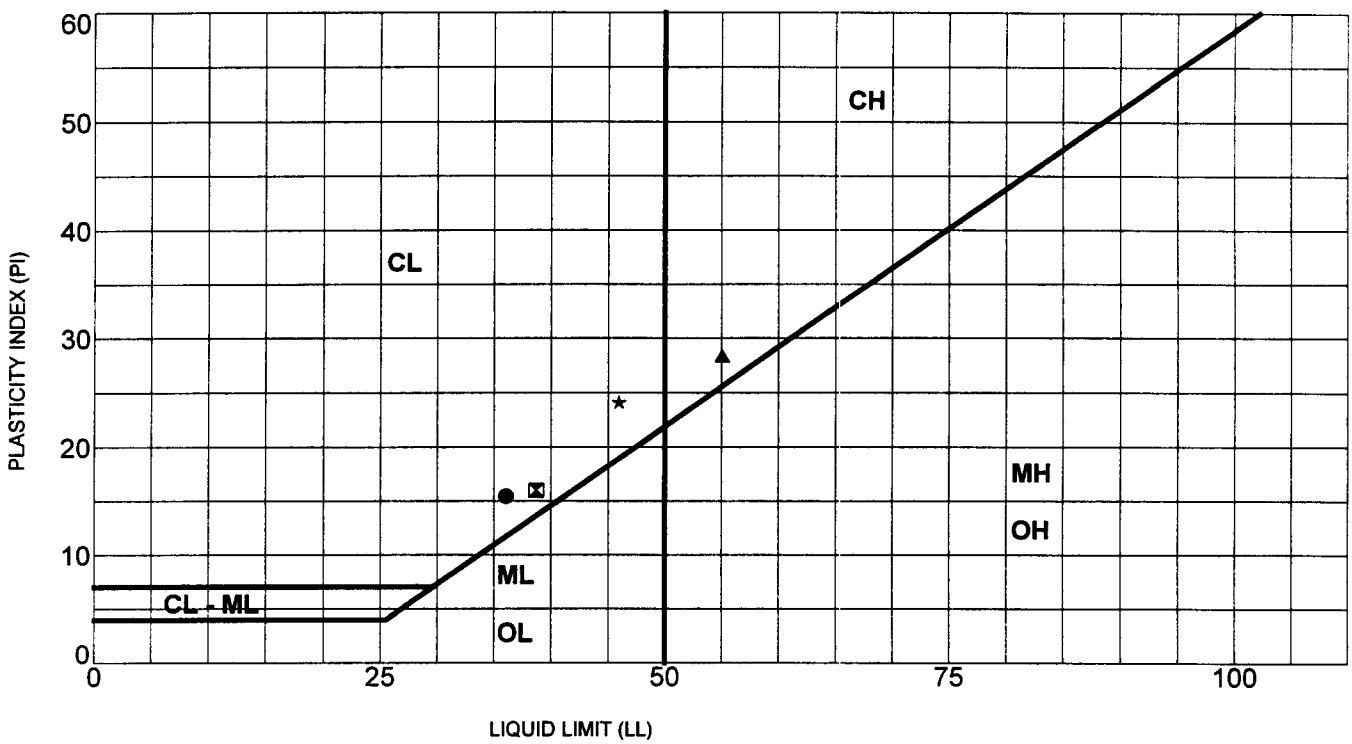
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-43



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-20-209	3.0	36	21	15	Lean CLAY (CL)
⊠	WB-20-210	3.0	39	23	16	Lean CLAY (CL)
▲	WB-20-211	15.2	55	27	28	Fat CLAY (CH)
★	WB-20-211	18.3	46	22	24	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

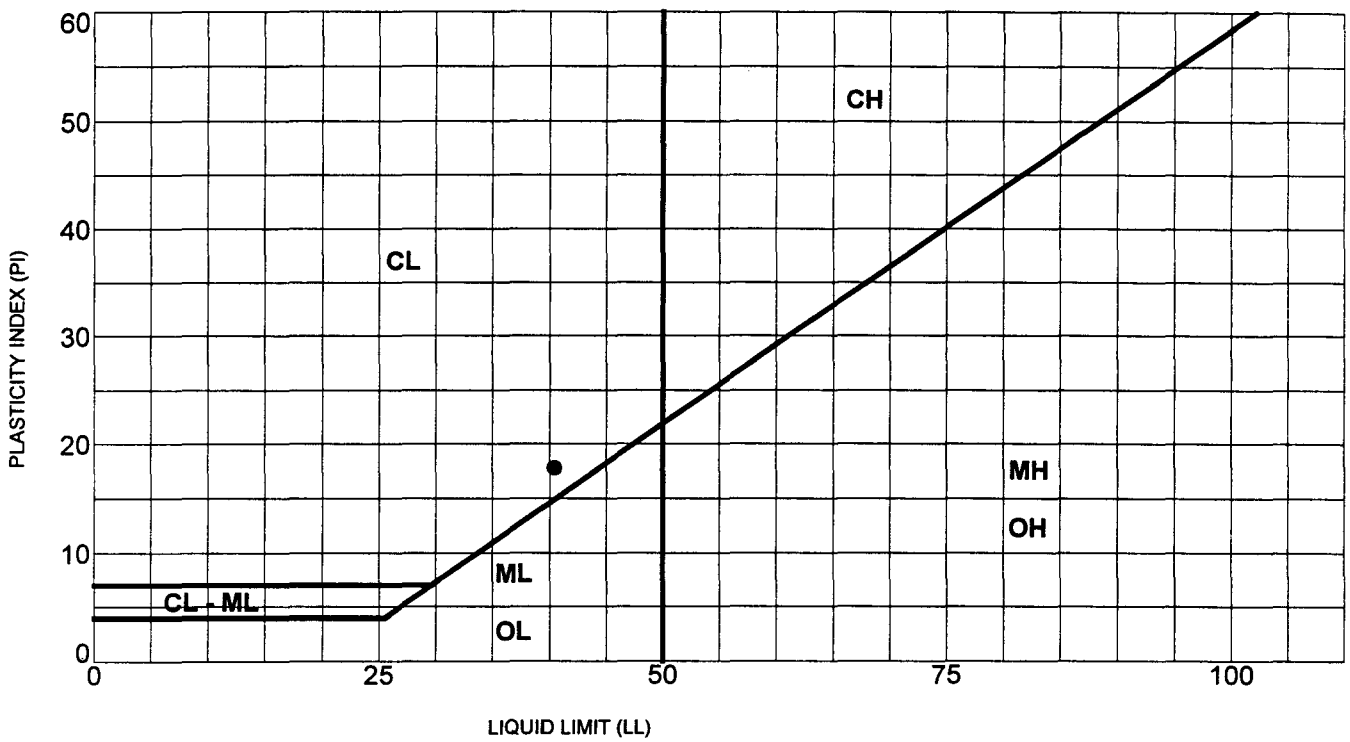
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-44



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-21-205	6.1	40	23	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

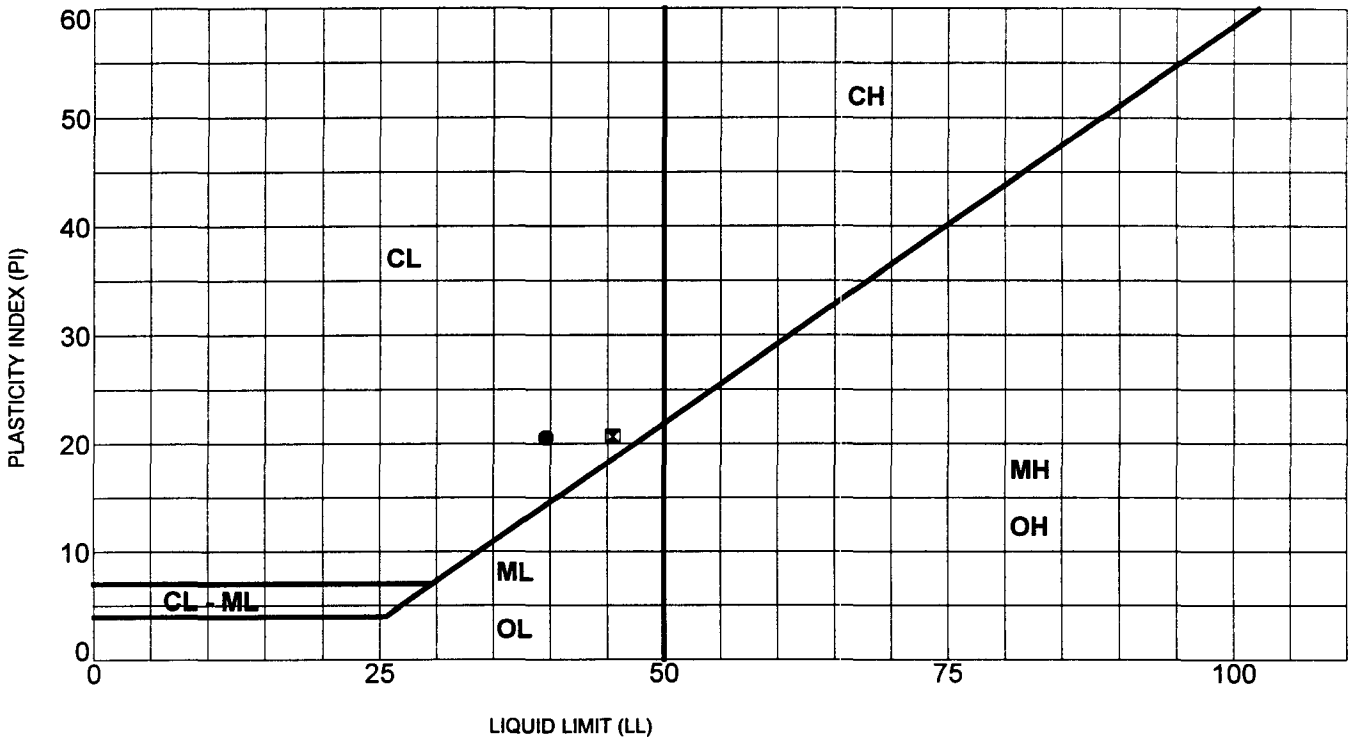
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-45



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-22-206	12.2	40	19	21	Lean CLAY (CL)
⊠	WB-22-208	13.7	45	25	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

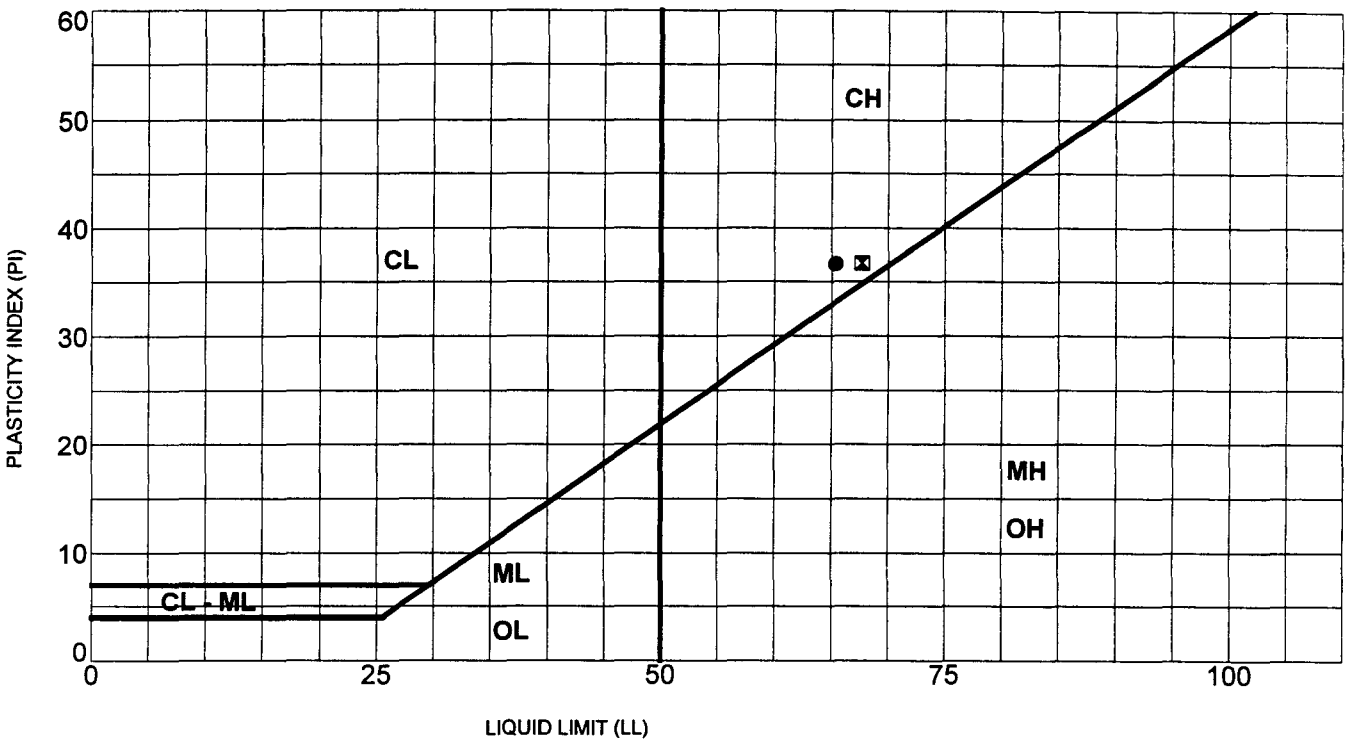
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-46



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-24-202	9.1	65	29	37	Fat CLAY (CH)
⊠	WB-24-204	7.6	68	31	37	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

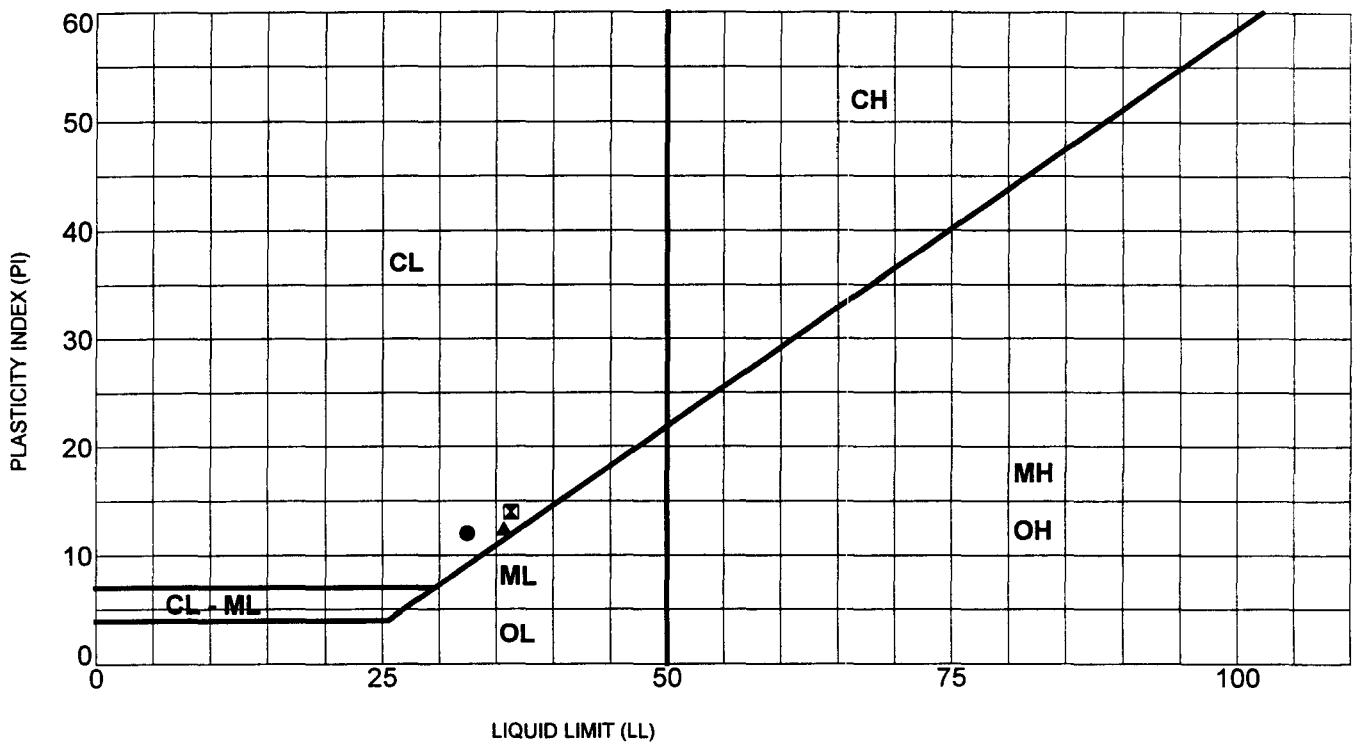
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-47



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-25-200	1.5	32	20	12	Lean CLAY (CL)
⊠	WB-25-200	5.2	36	22	14	Lean CLAY (CL)
▲	WB-25-201	6.1	36	23	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

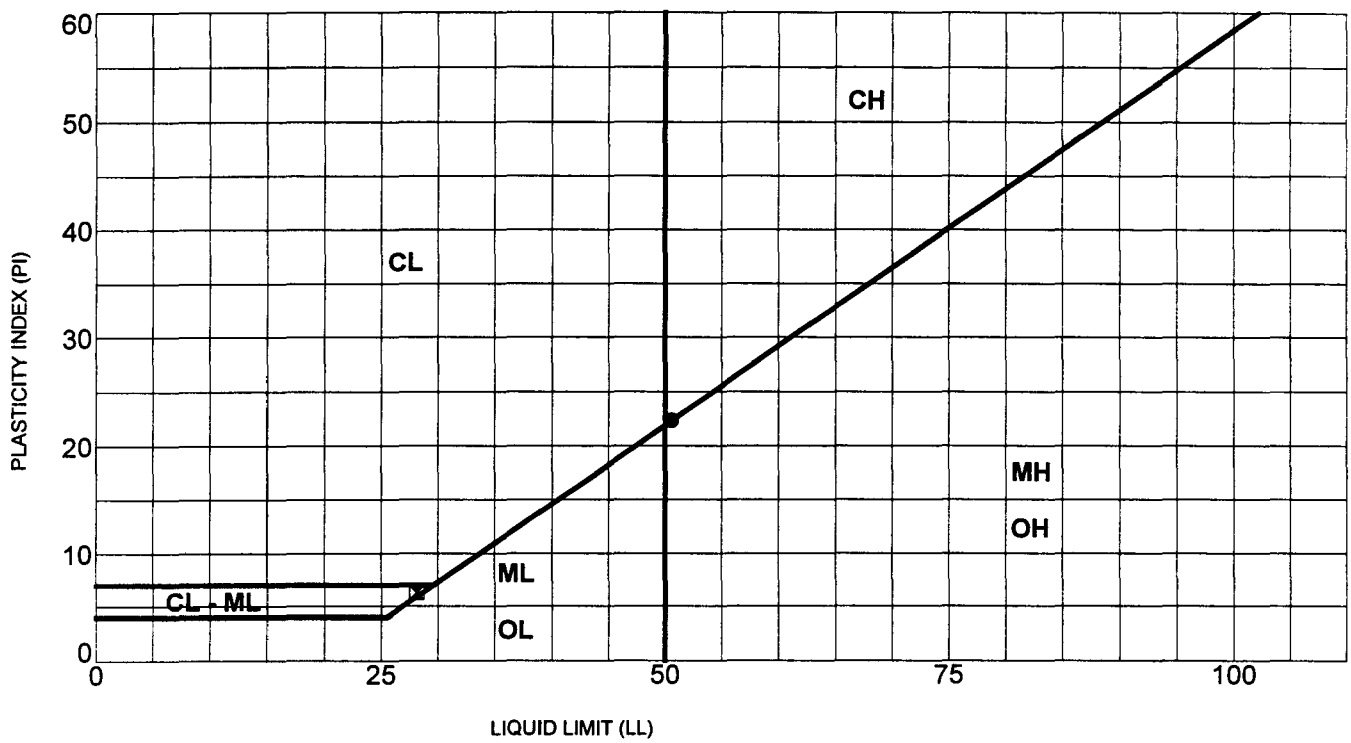
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-48



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-26-314	6.1	51	28	22	Fat CLAY (CH)
⧗	WB-26-314	12.2	28	22	6	Silty CLAY (CL-ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

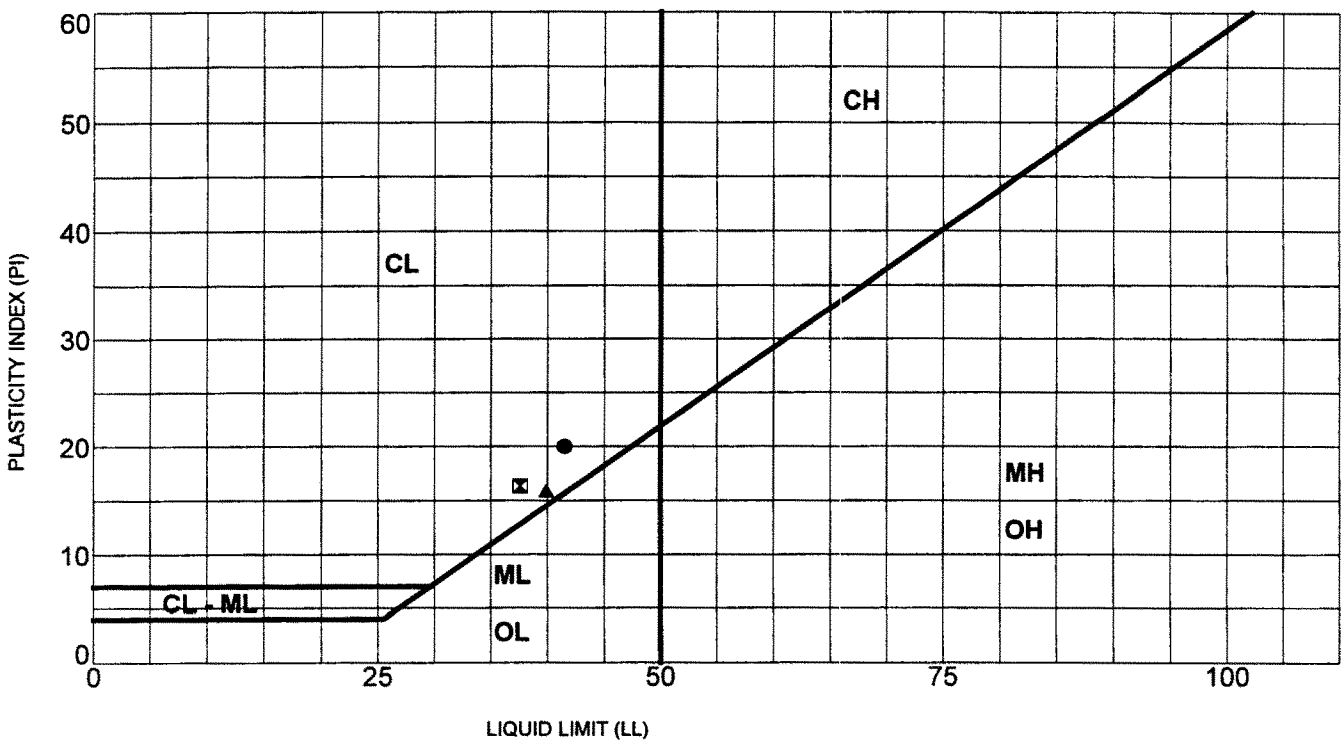
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-49



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-27-315	0.6	41	21	20	Lean CLAY (CL)
⊠	WB-27-315	6.1	38	21	16	Lean CLAY (CL)
▲	WB-27-317	4.6	40	24	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

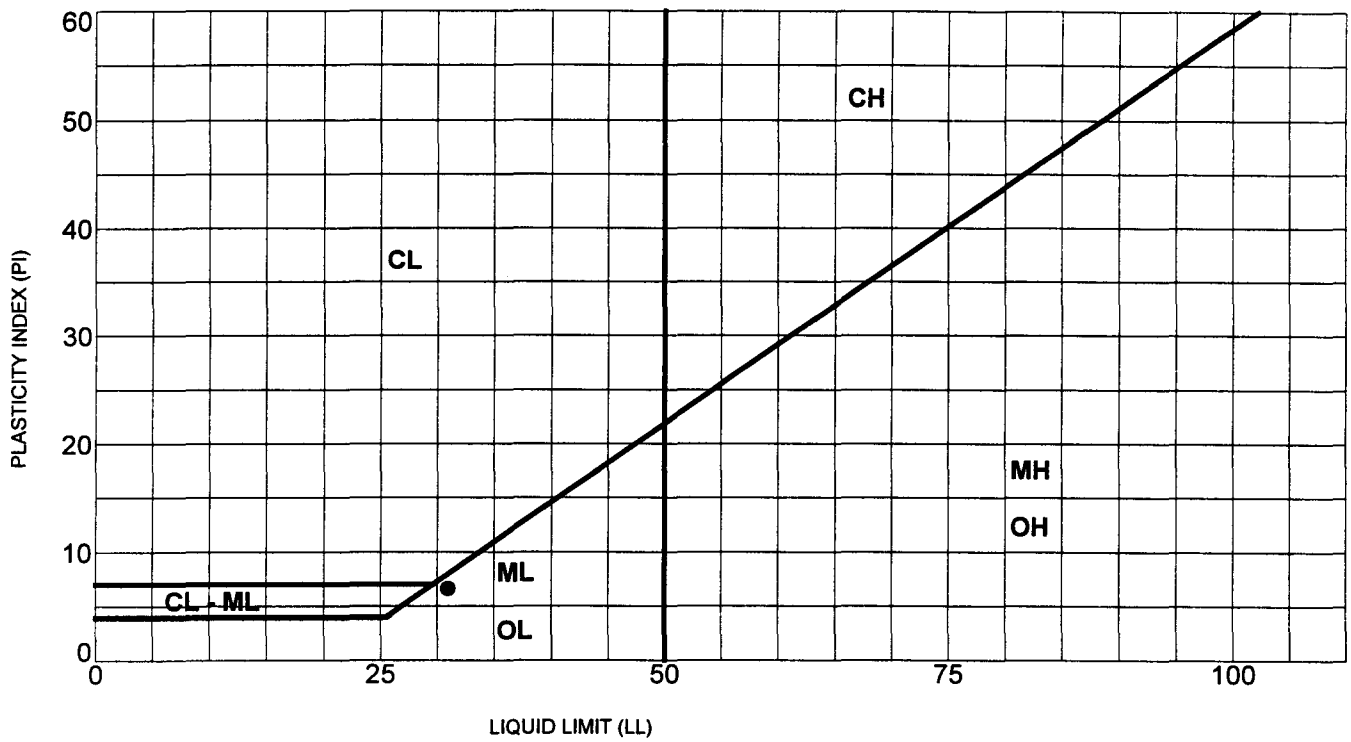
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-50



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-28-319	1.5	31	24	7	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

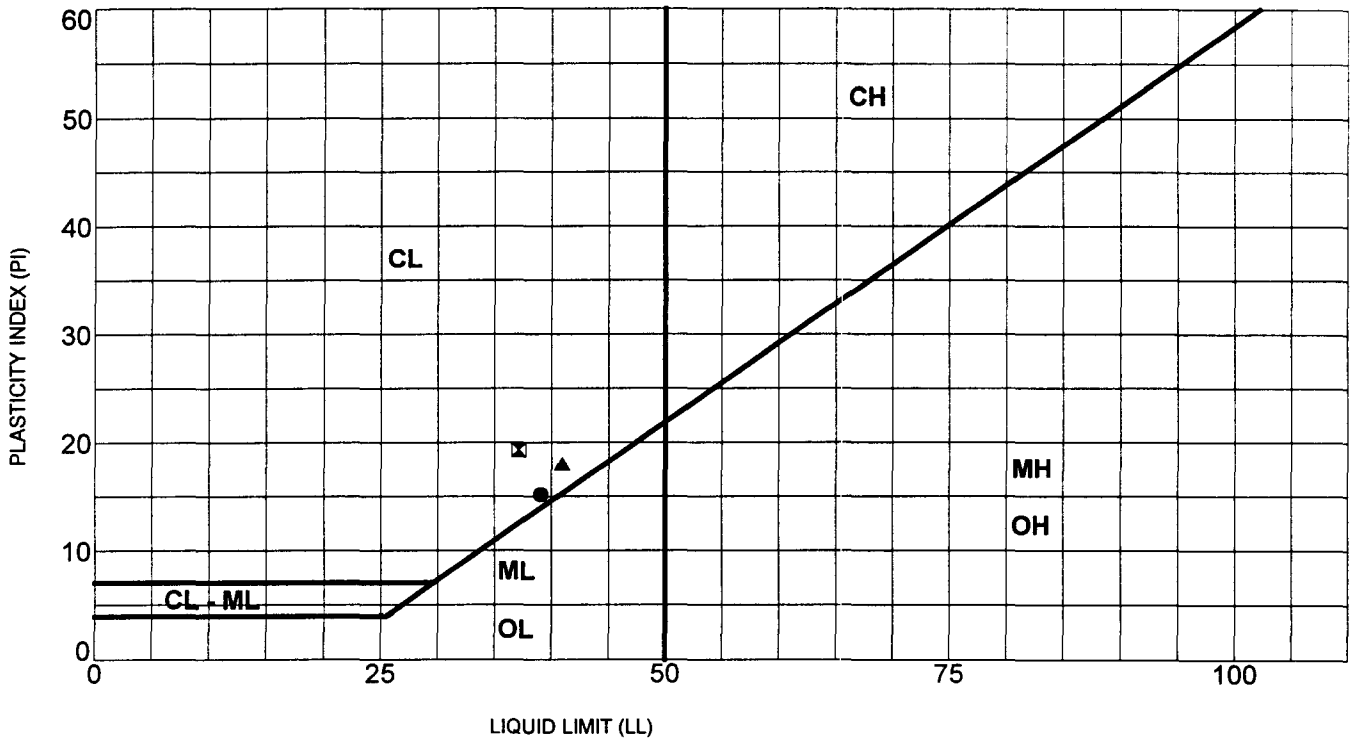
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-51



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-29-320	3.7	39	24	15	Lean CLAY (CL)
⊠	WB-29-320	9.1	37	18	19	Lean CLAY (CL)
▲	WB-29-320	12.2	41	23	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

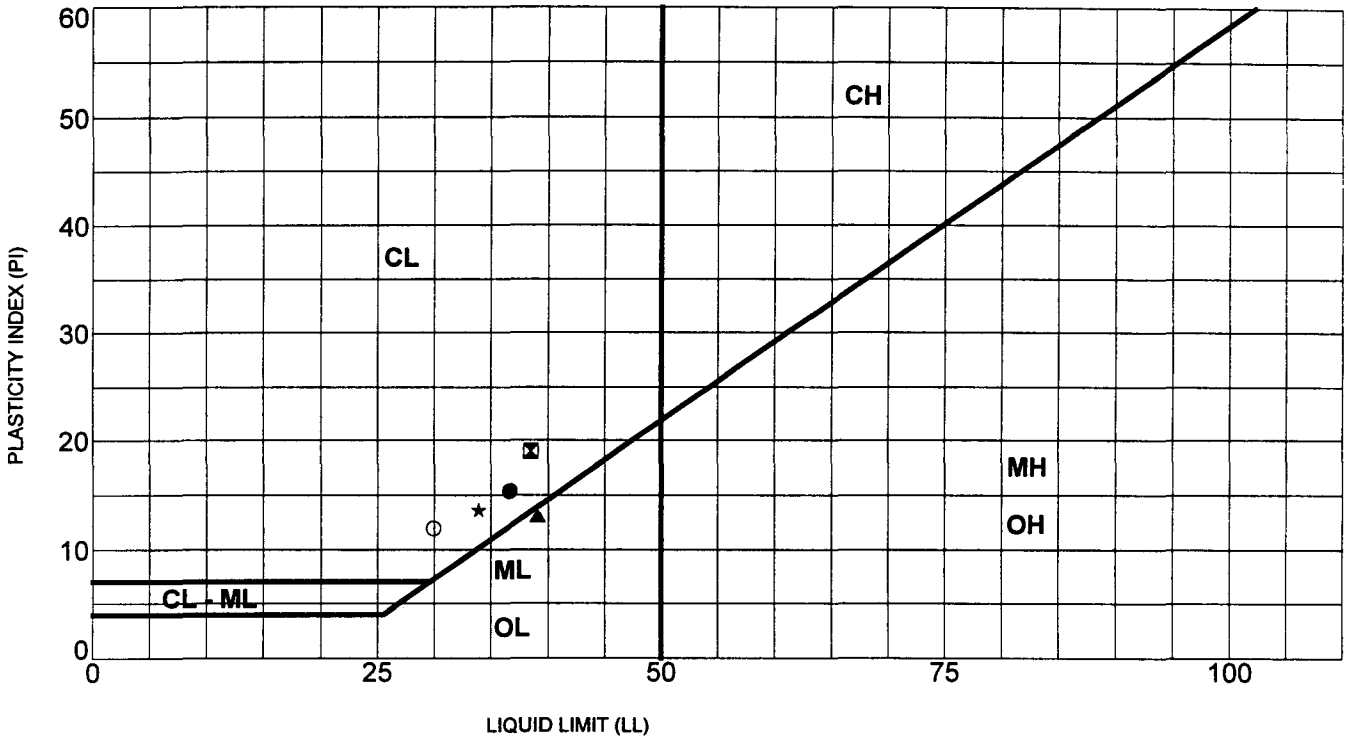
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-52



	Sample	Depth (m)	LL	PL	PI	Description
●	WB-29-322	2.1	37	21	15	Lean CLAY (CL)
⊠	WB-29-322	4.6	39	20	19	Lean CLAY with SAND (CL)
▲	WB-29-322	6.1	39	26	13	SILT (ML)
★	WB-29-322	8.2	34	20	14	Lean CLAY (CL)
○	WB-29-322	10.7	30	18	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

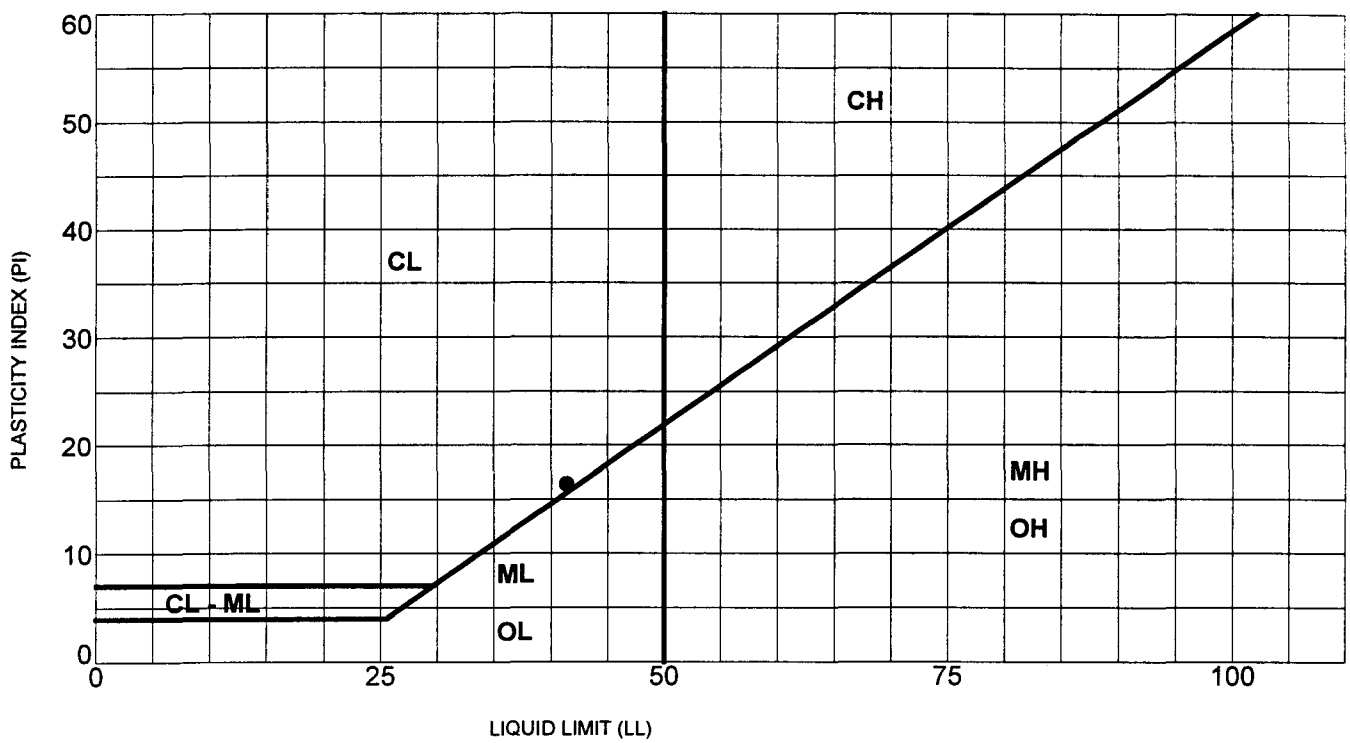
PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-53

(This page left blank intentionally.)



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-357	10.7	41	25	16	Lean CLAY with sand (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

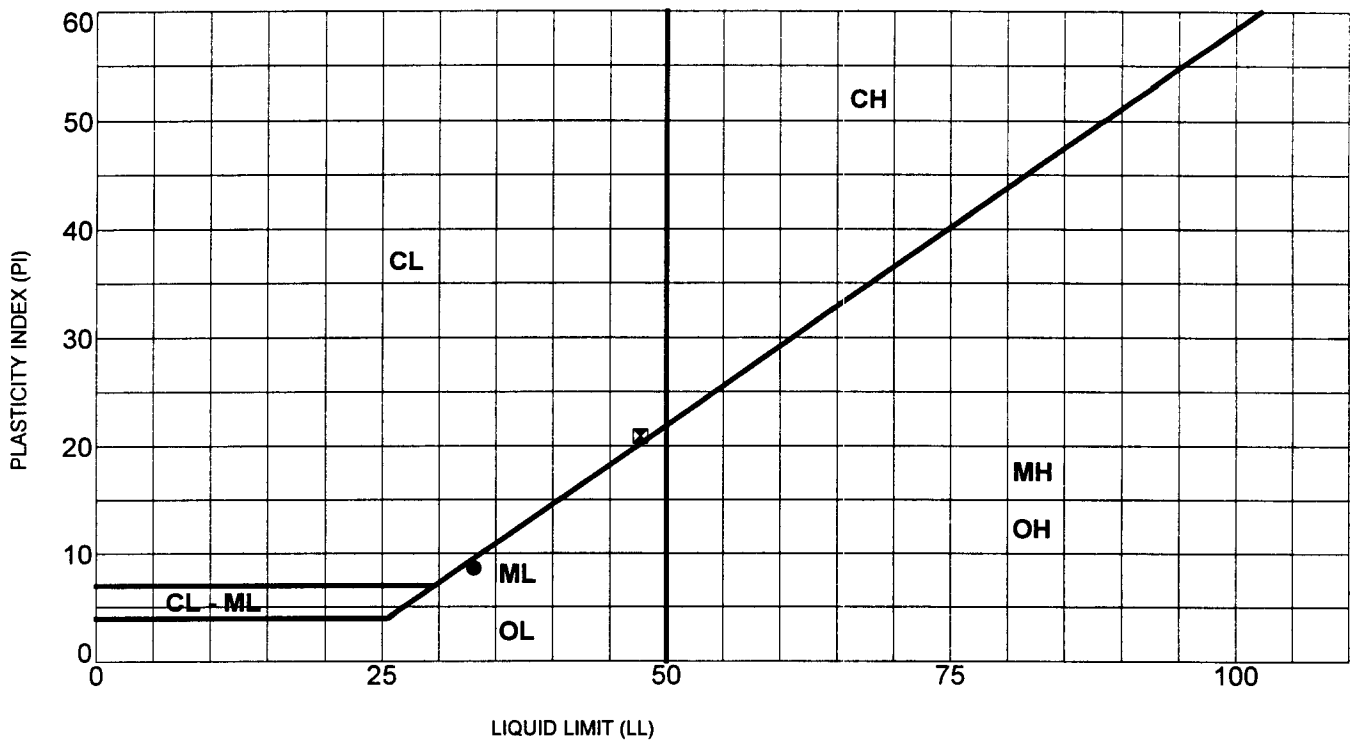
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-55



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-358	3.0	33	24	9	SILT (ML)
⊠	RB-358	15.2	48	27	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

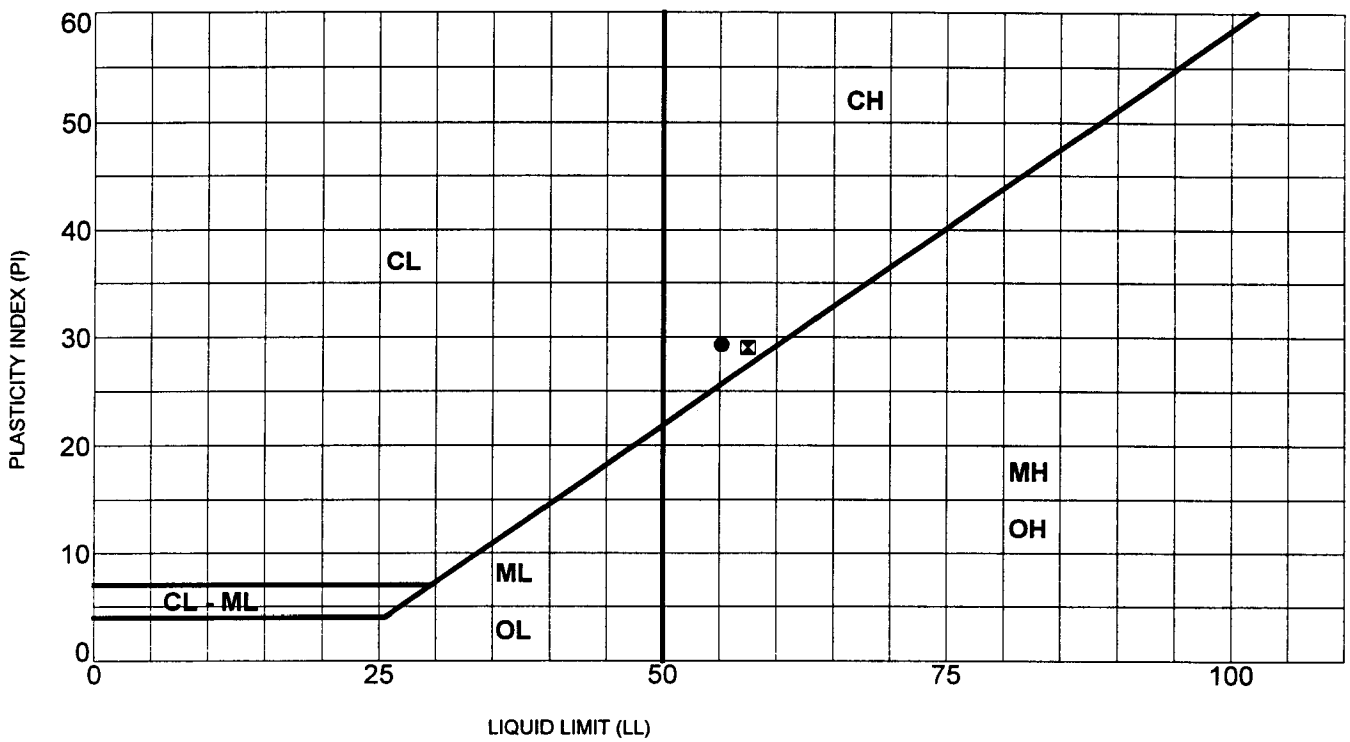
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-56



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-359	4.6	55	26	29	Fat CLAY (CH)
⊠	RB-359	19.8	57	28	29	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

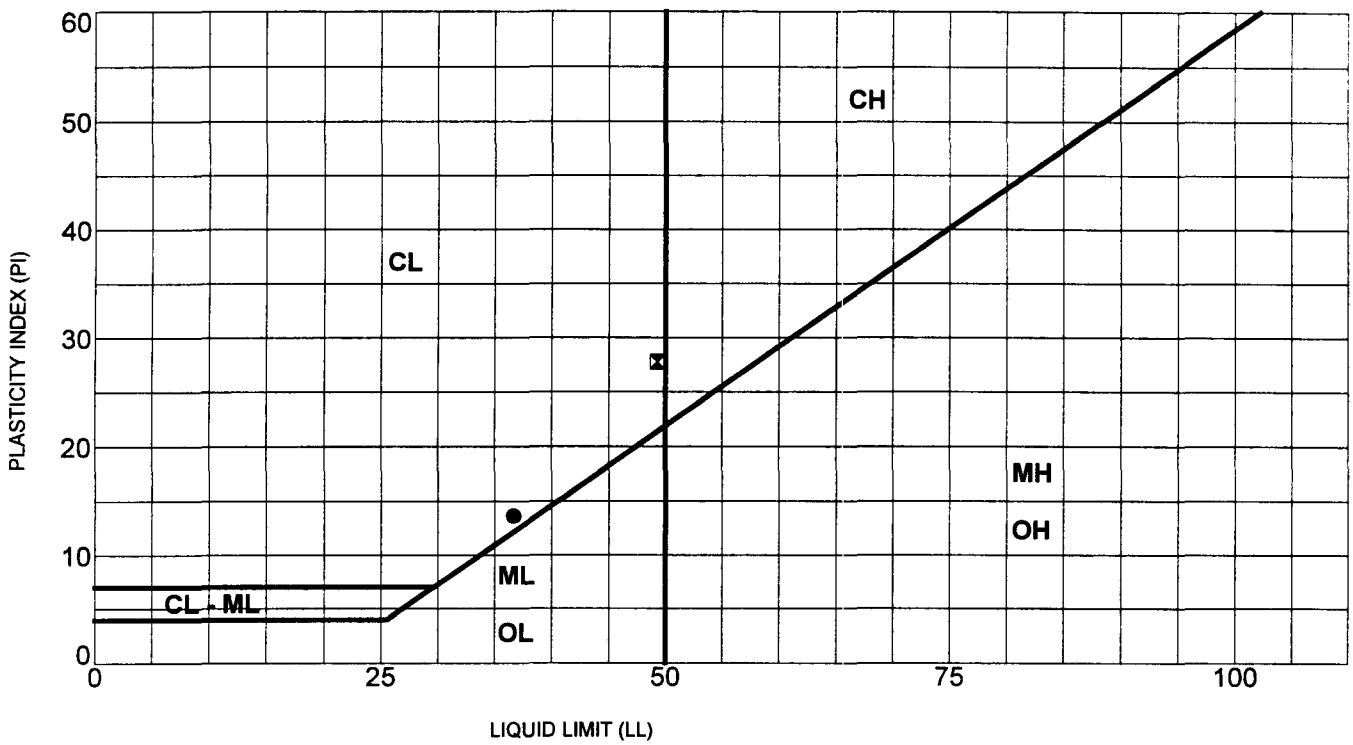
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-57



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-360	4.6	37	23	14	Lean CLAY (CL)
⊠	RB-360	7.6	49	21	28	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

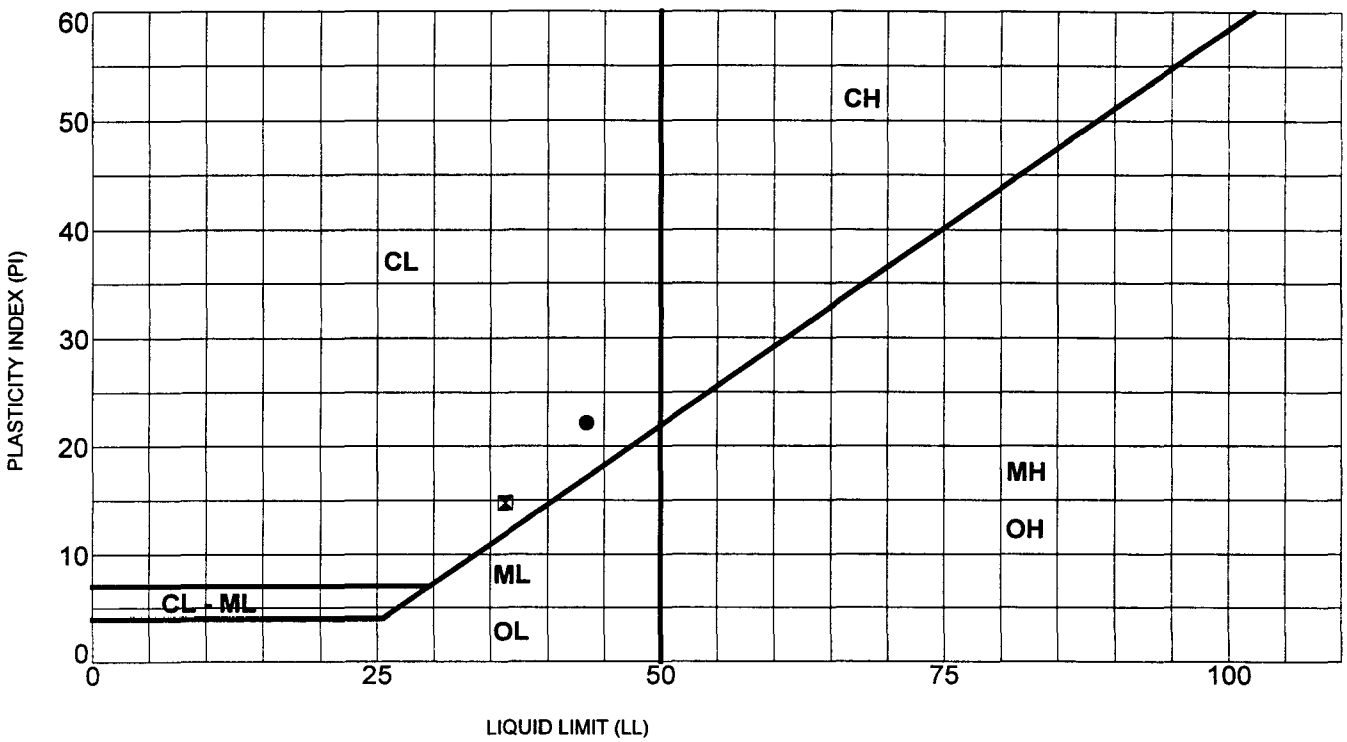
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-58



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-361	10.7	43	21	22	Lean CLAY (CL)
⊠	RB-361	21.3	36	22	15	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

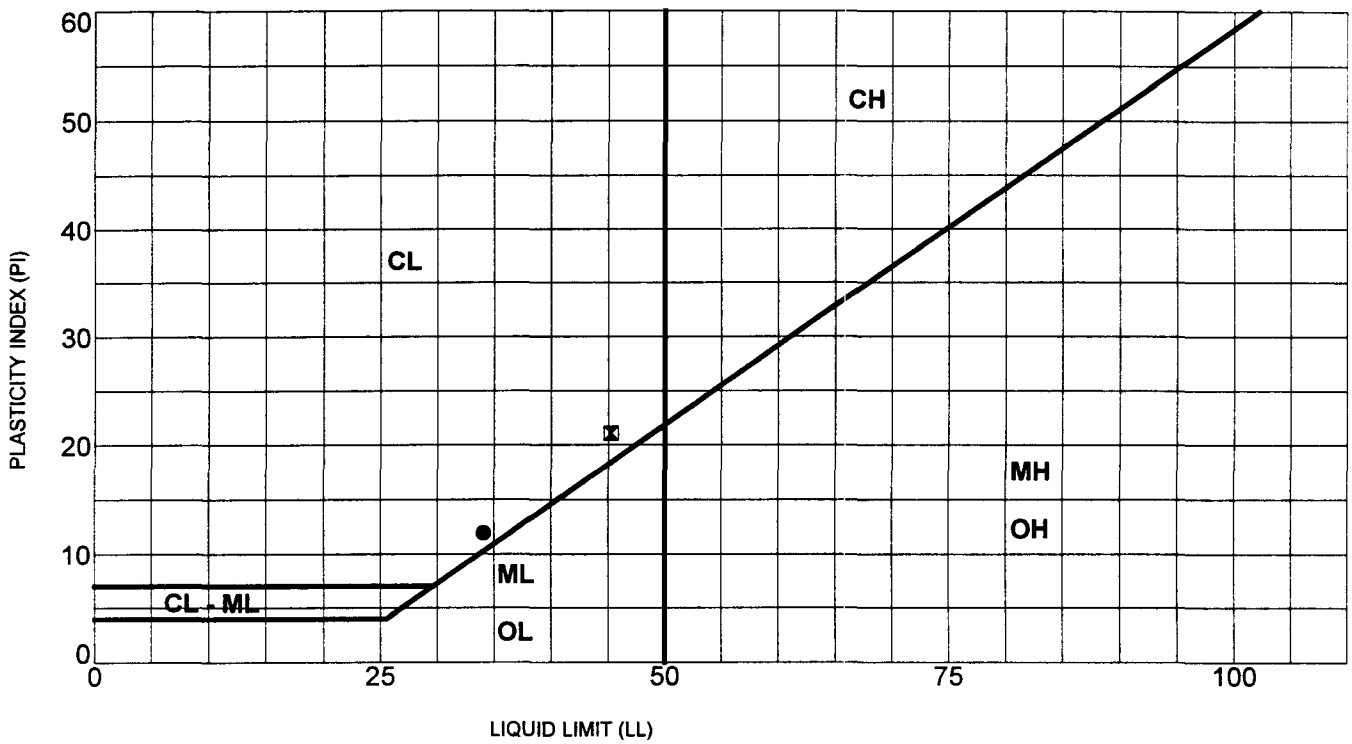
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-59



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-362	7.6	34	22	12	Lean CLAY (CL)
⊠	RB-362	19.8	45	24	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

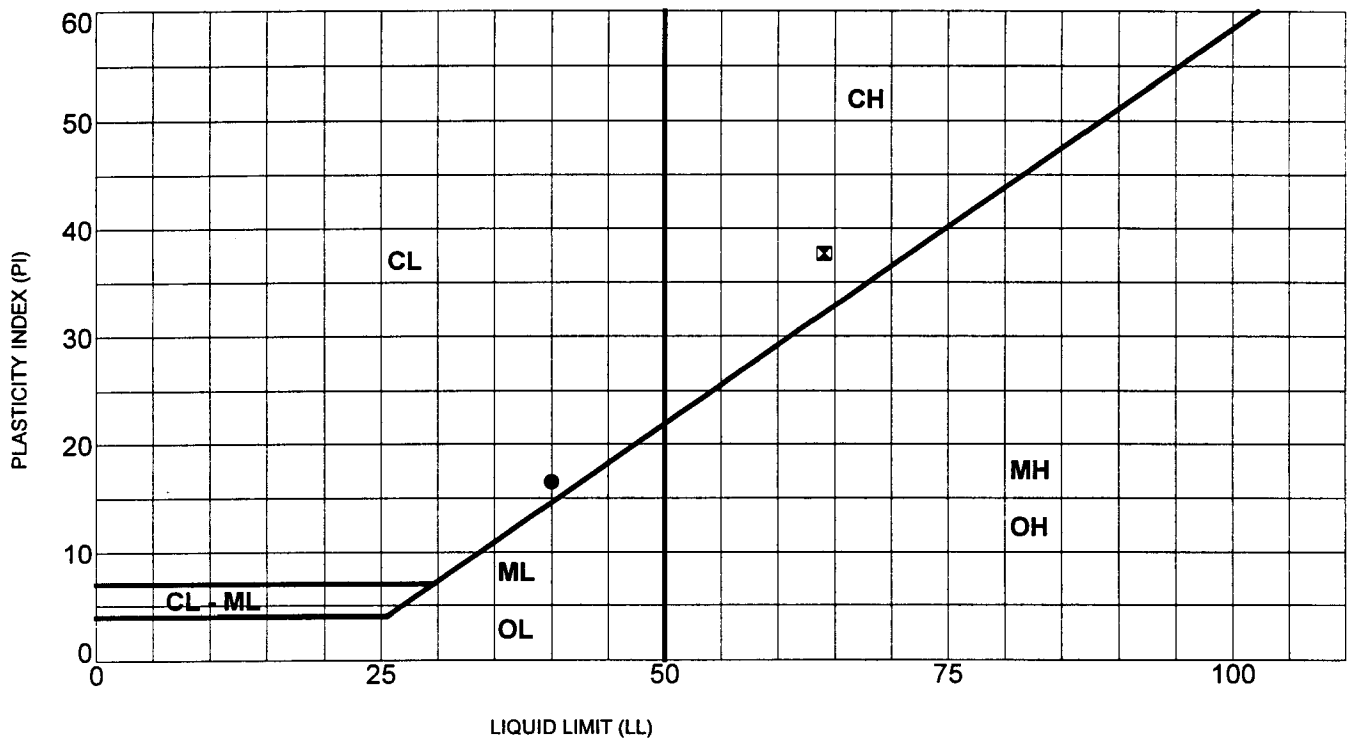
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-60



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-363	6.1	40	23	17	Lean CLAY (CL)
⊠	RB-363	18.3	64	26	38	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

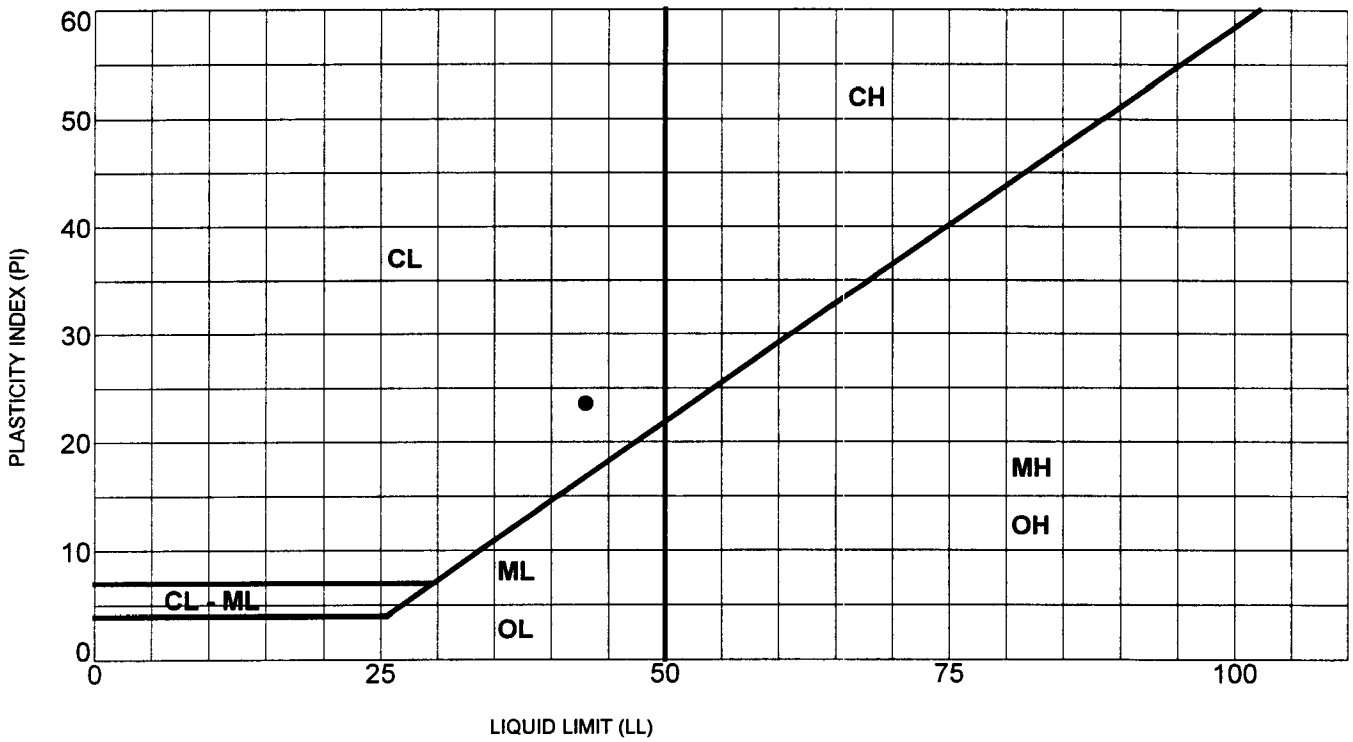
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-61



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-364	4.6	43	19	24	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

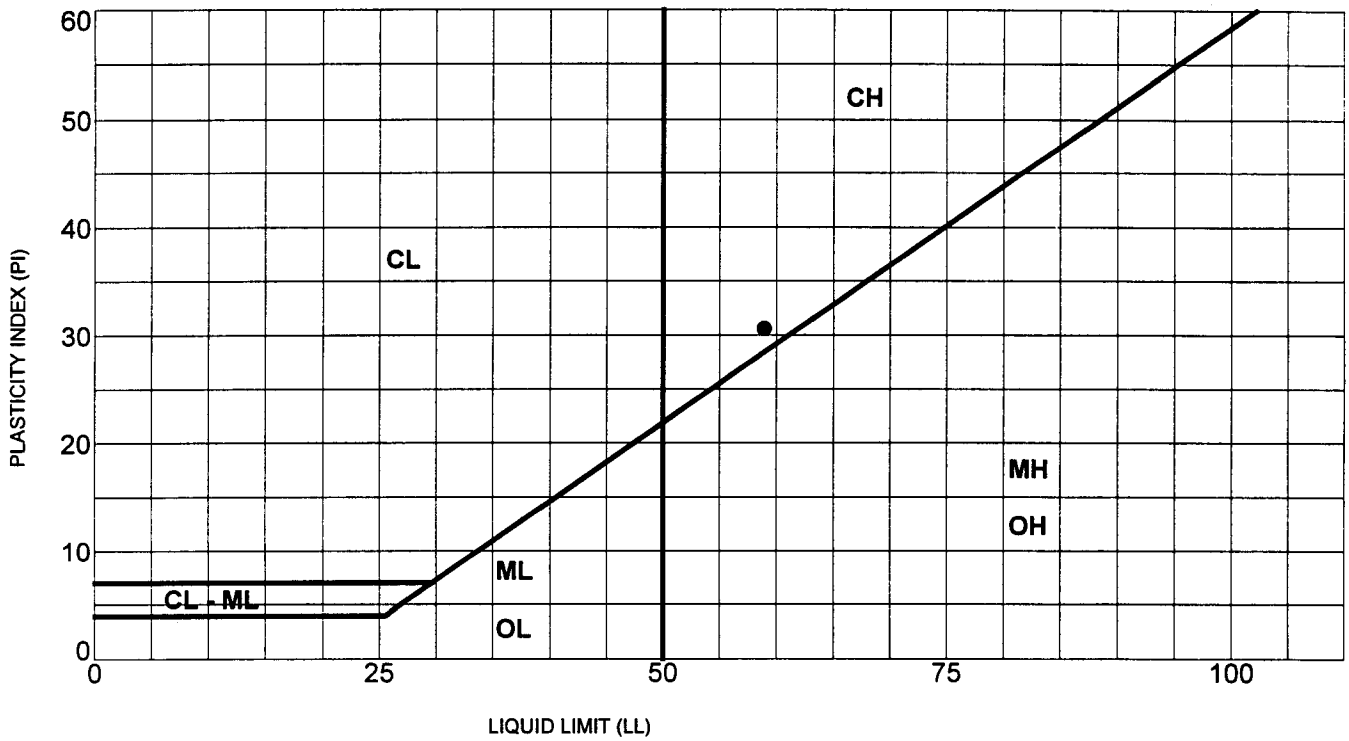
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-62



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-366	1.5	59	28	31	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

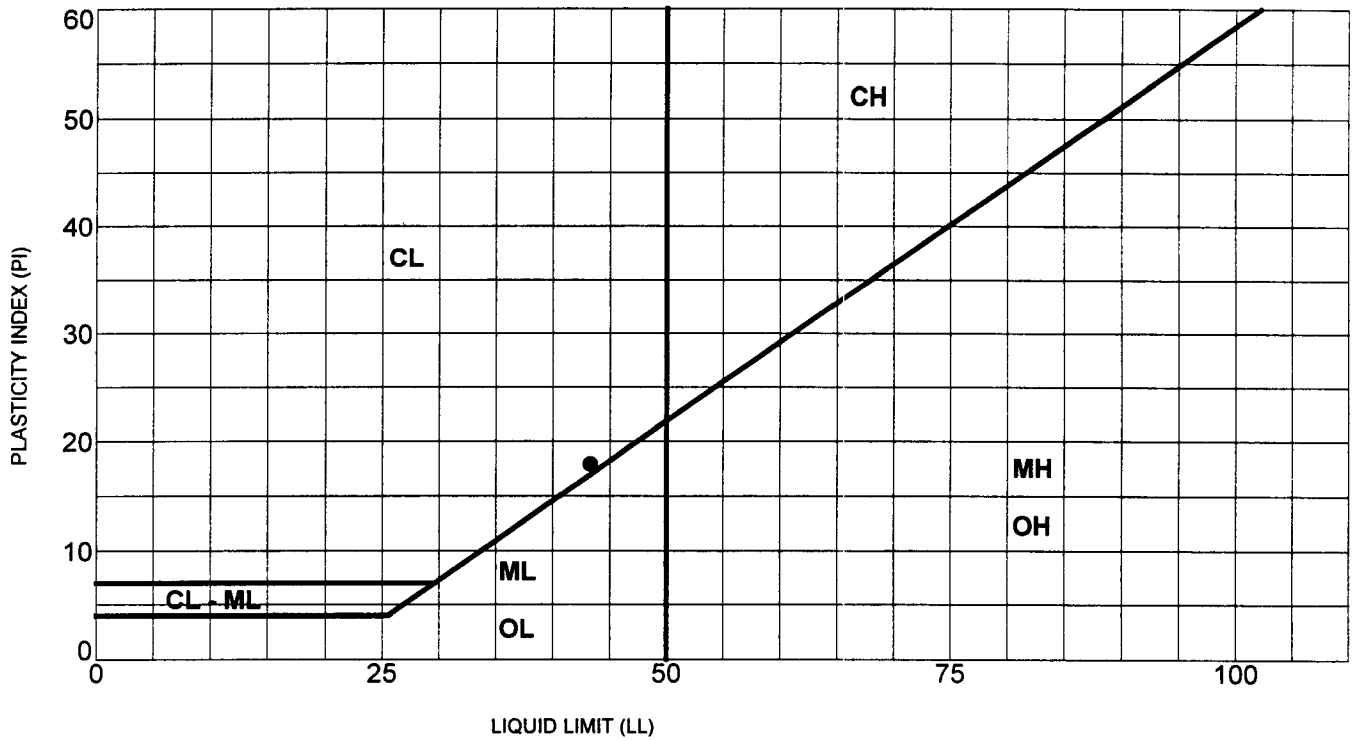
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-63



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-368	4.6	43	25	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

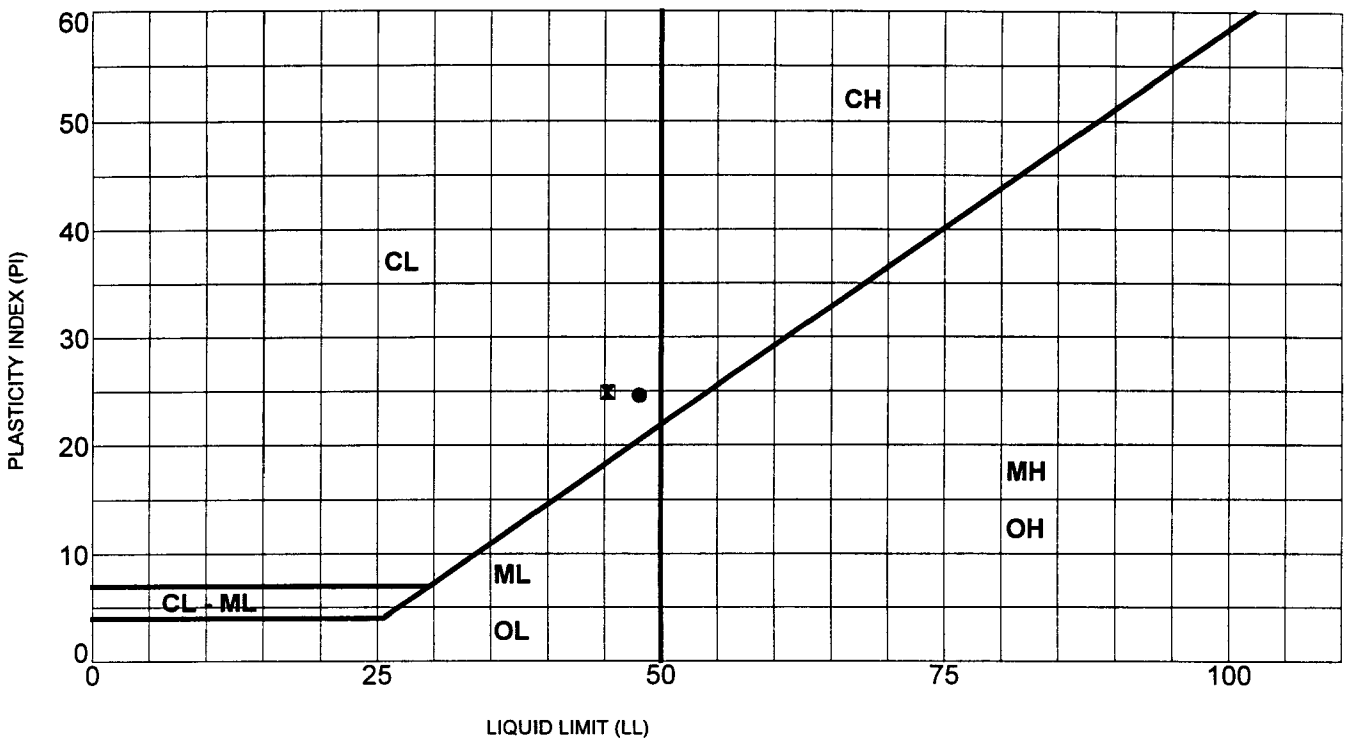
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-64



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-369	1.5	48	23	25	Lean CLAY (CL)
⊠	RB-369	13.7	45	20	25	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

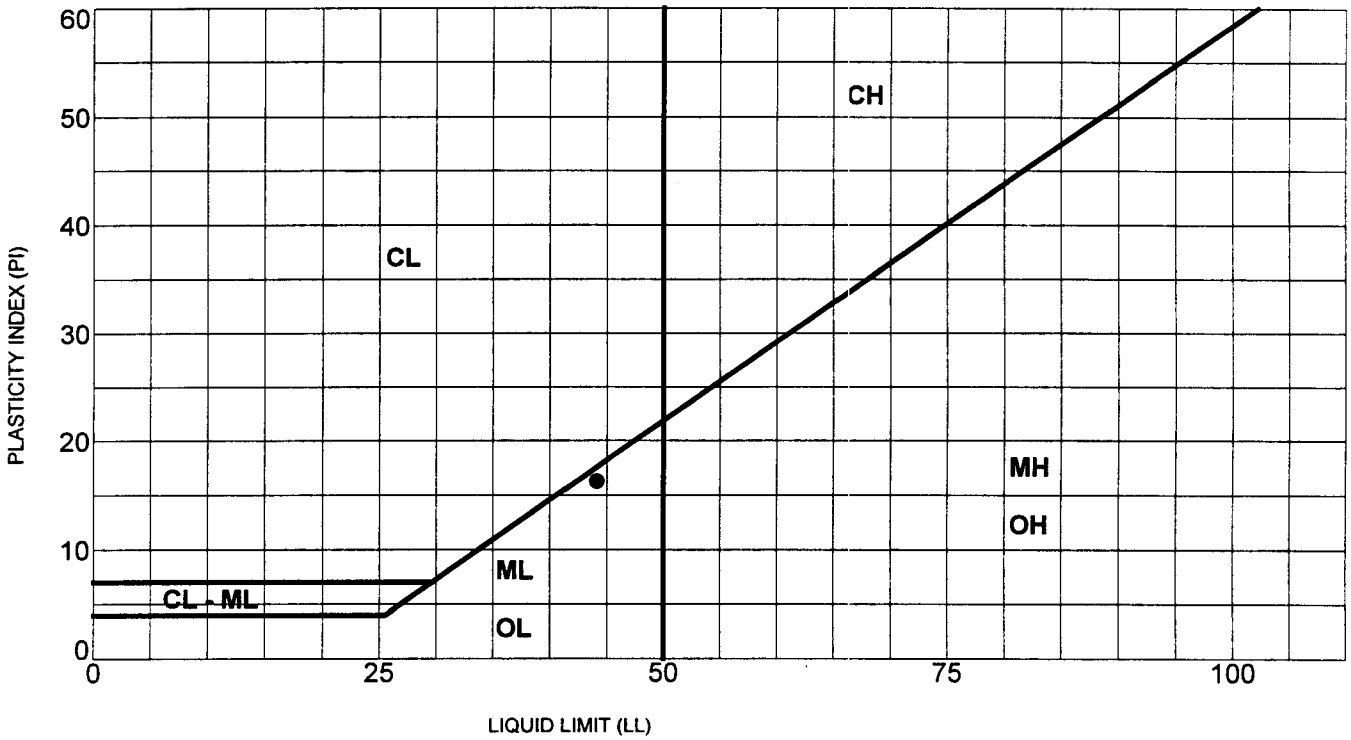
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-65



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-370	18.3	44	28	16	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

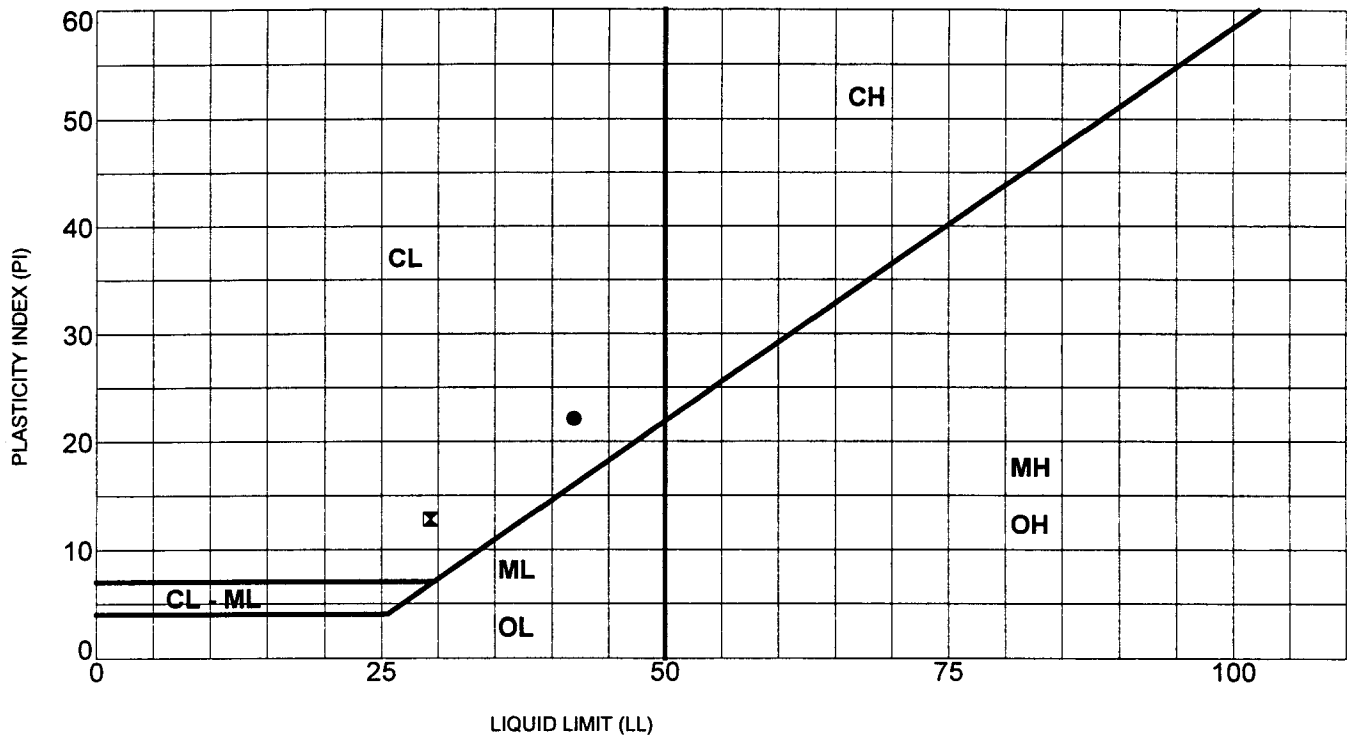
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-66



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-371	3.0	42	20	22	Lean CLAY (CL)
⧗	RB-371	19.8	29	17	13	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

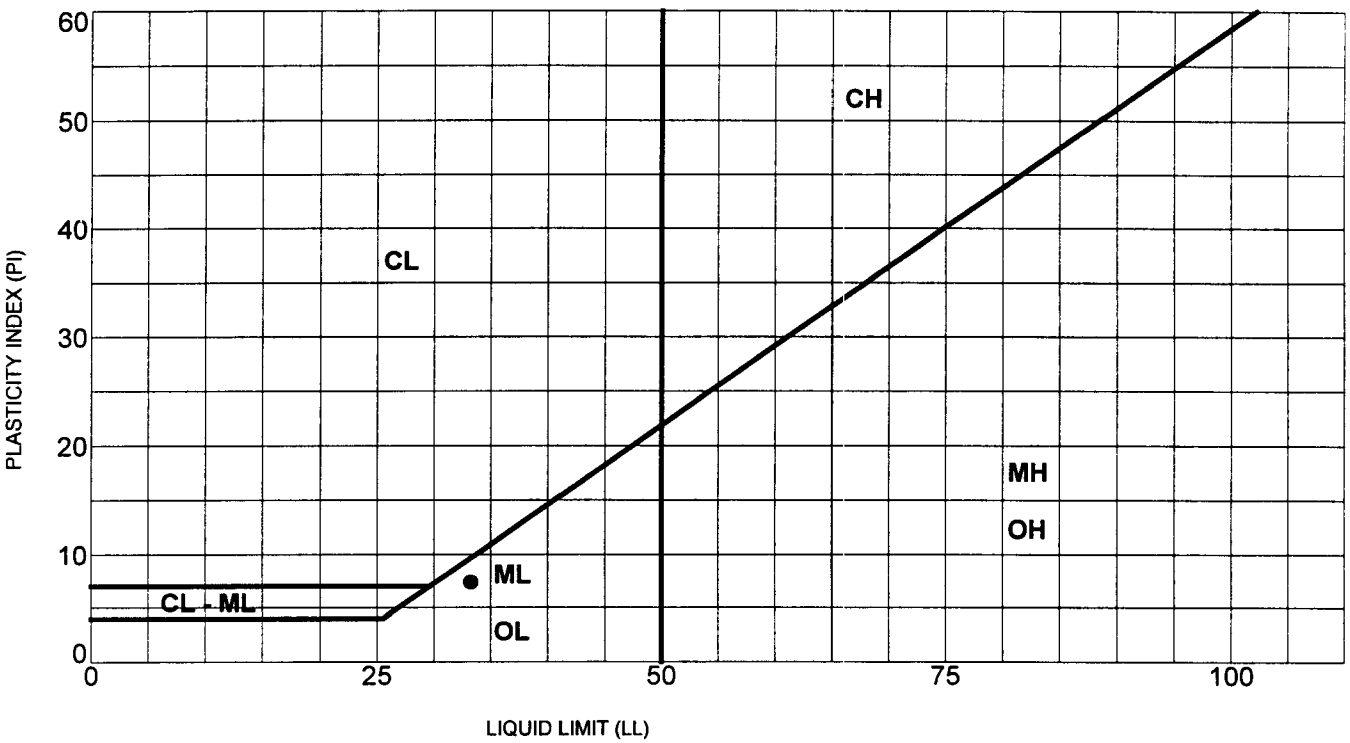
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-67



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-372	7.6	33	26	7	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

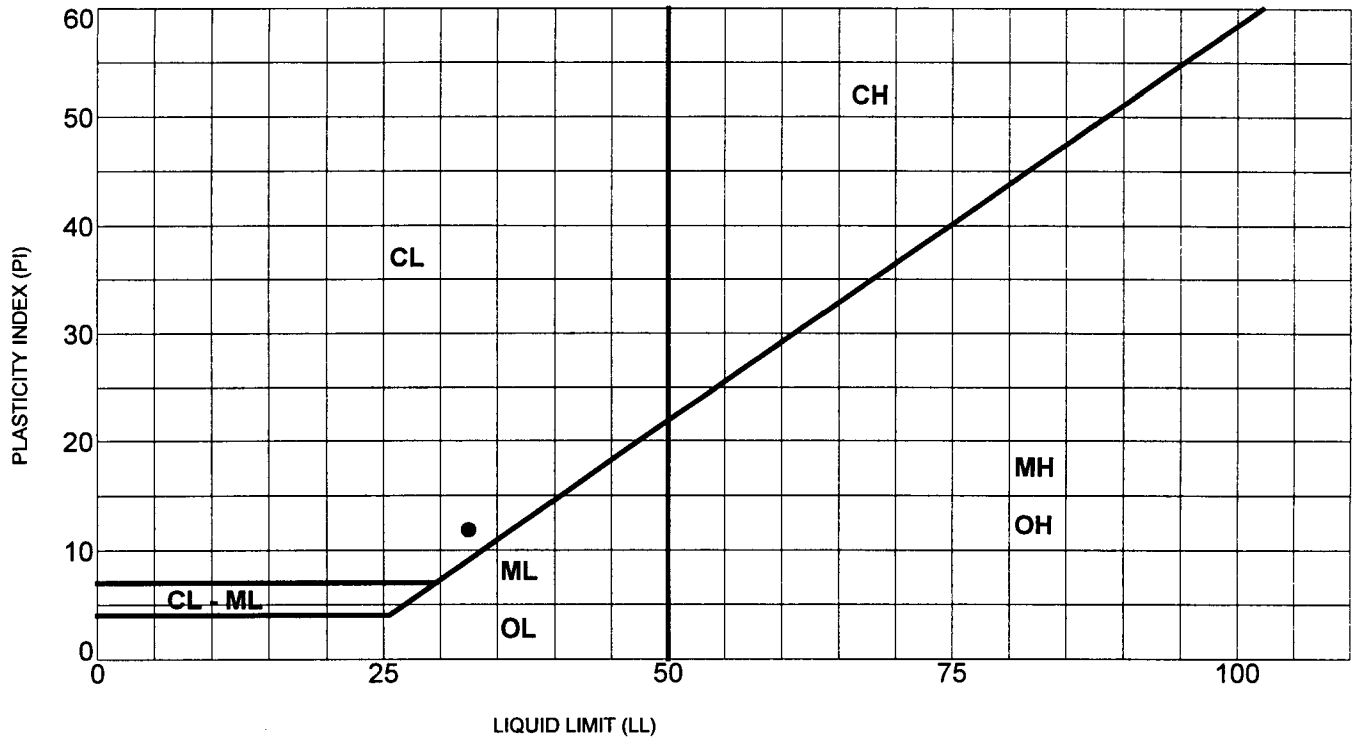
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-68



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-373	10.7	32	21	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

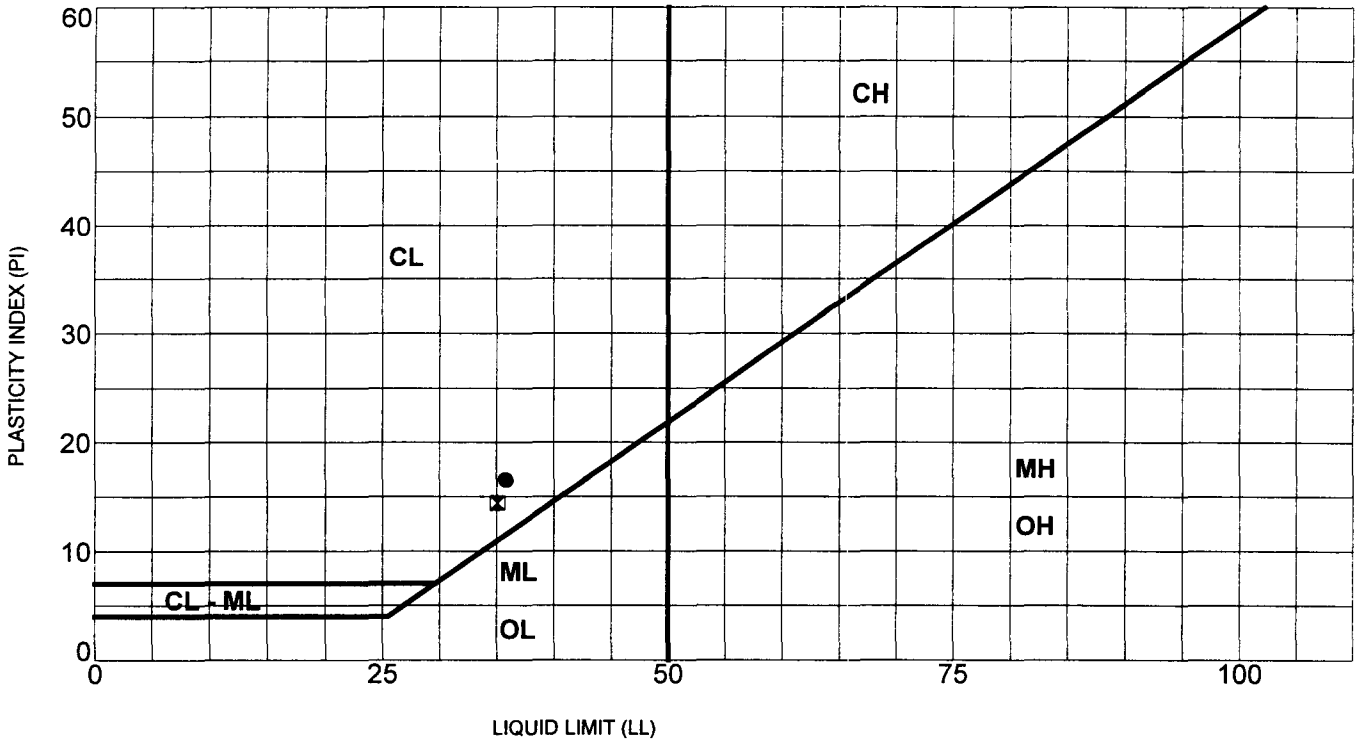
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-69



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-374	6.1	36	19	17	Lean CLAY (CL)
⊠	RB-374	9.1	35	21	14	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

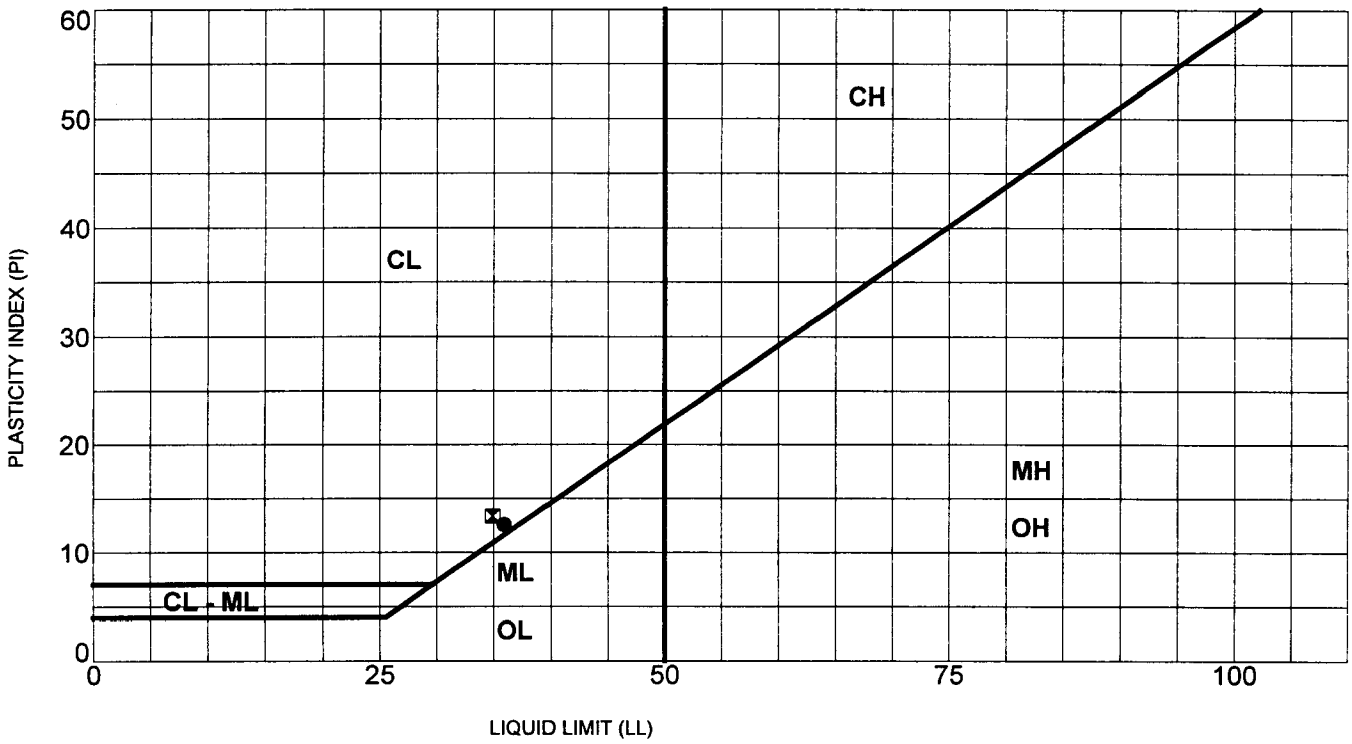
PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-70



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-376	6.1	36	23	13	Lean CLAY (CL)
⊠	RB-376	12.2	35	22	13	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

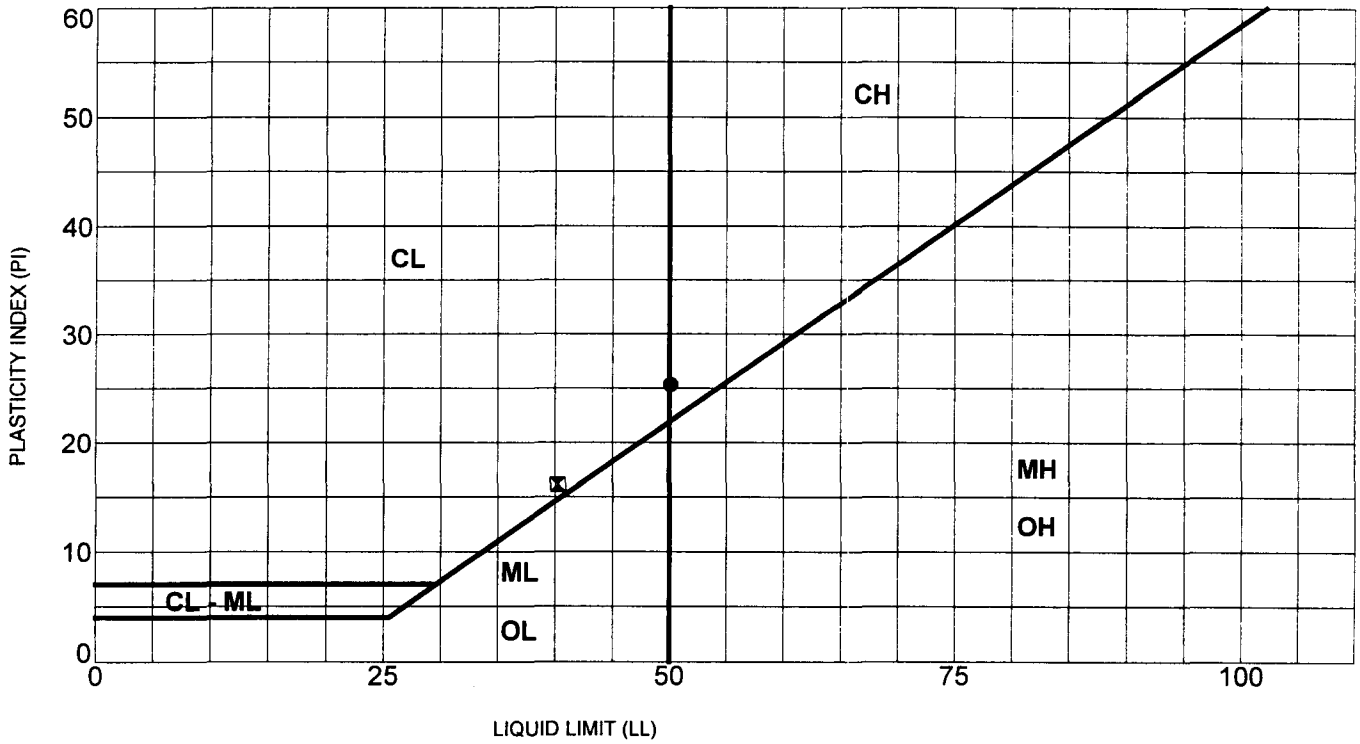
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-71



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-377	6.1	50	25	25	Fat CLAY (CH)
⊠	RB-377	12.2	40	24	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

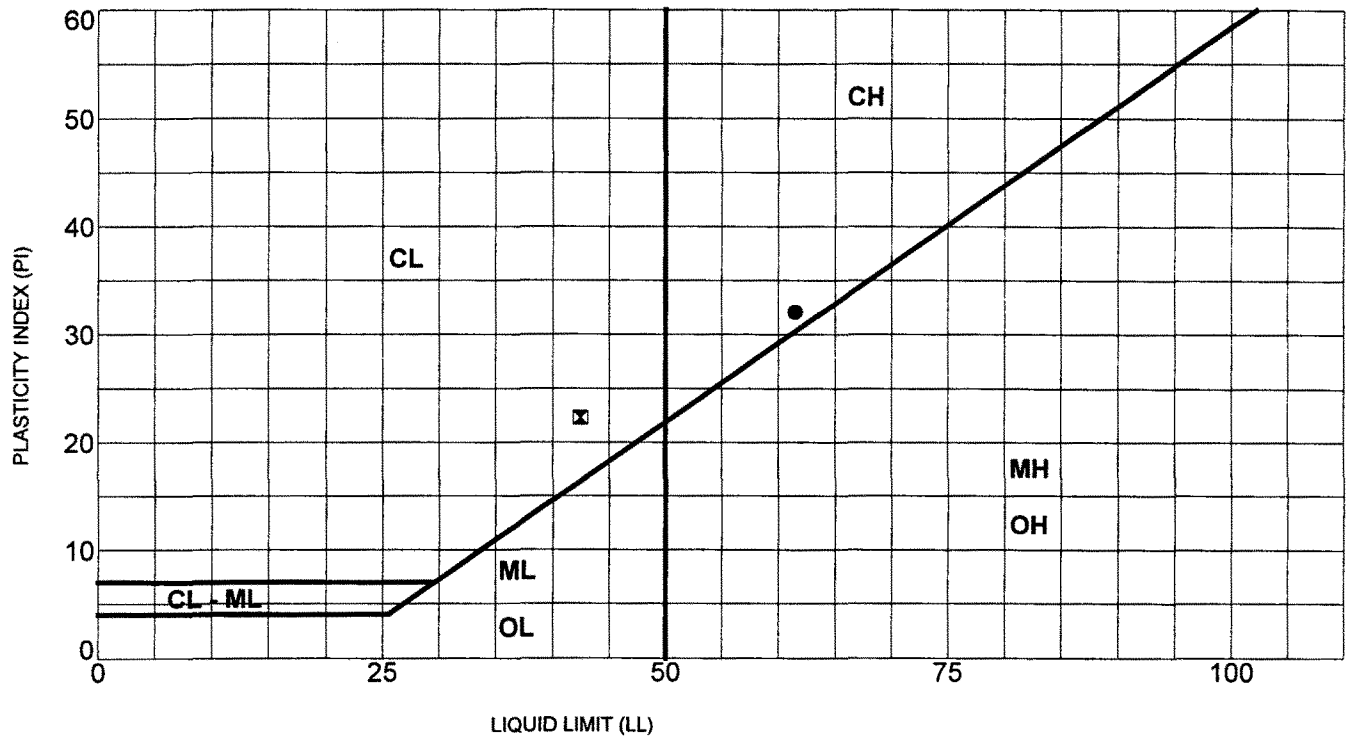
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-72



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-378	6.1	62	29	32	Fat CLAY (CH)
⊠	RB-378	15.2	42	20	22	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

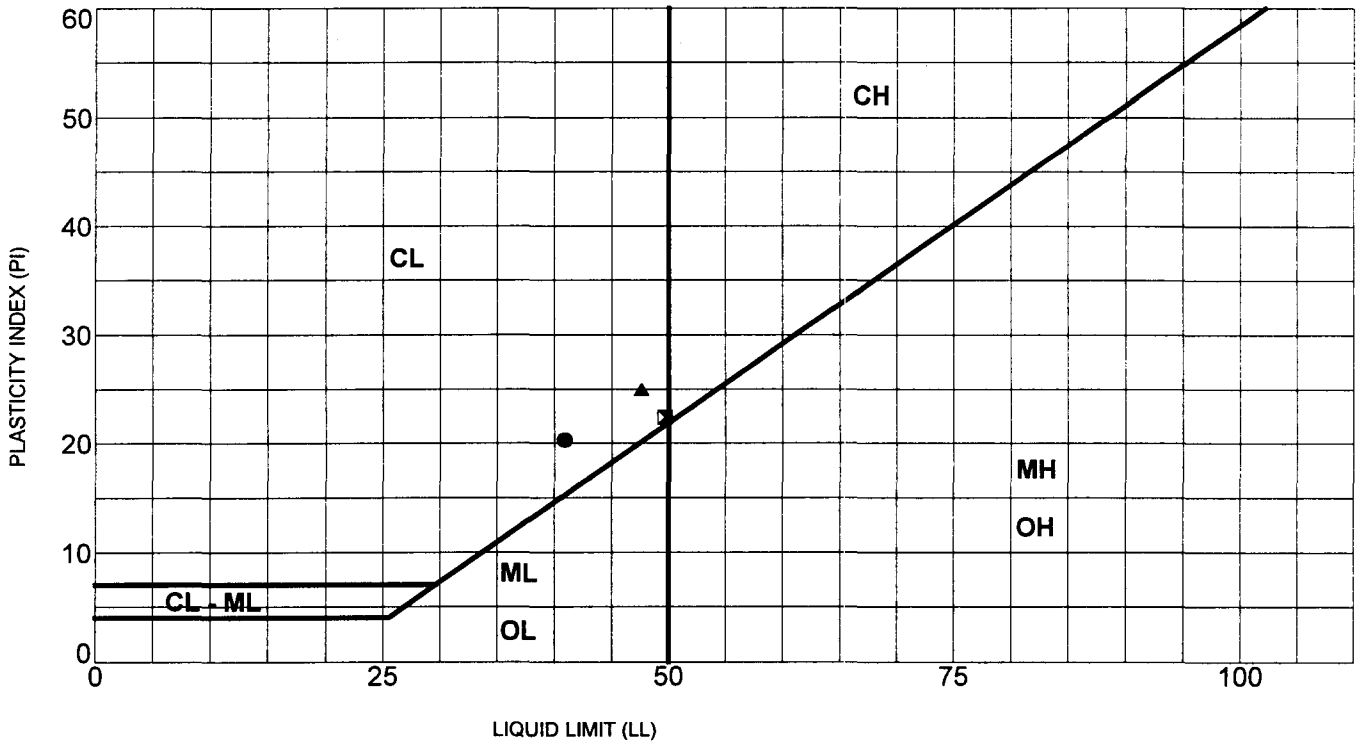
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-73



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-379	4.6	41	21	20	Lean CLAY (CL)
⊠	RB-379	6.7	50	27	22	Lean CLAY with sand (CL)
▲	RB-379	10.7	48	23	25	Clayey SAND (SC)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

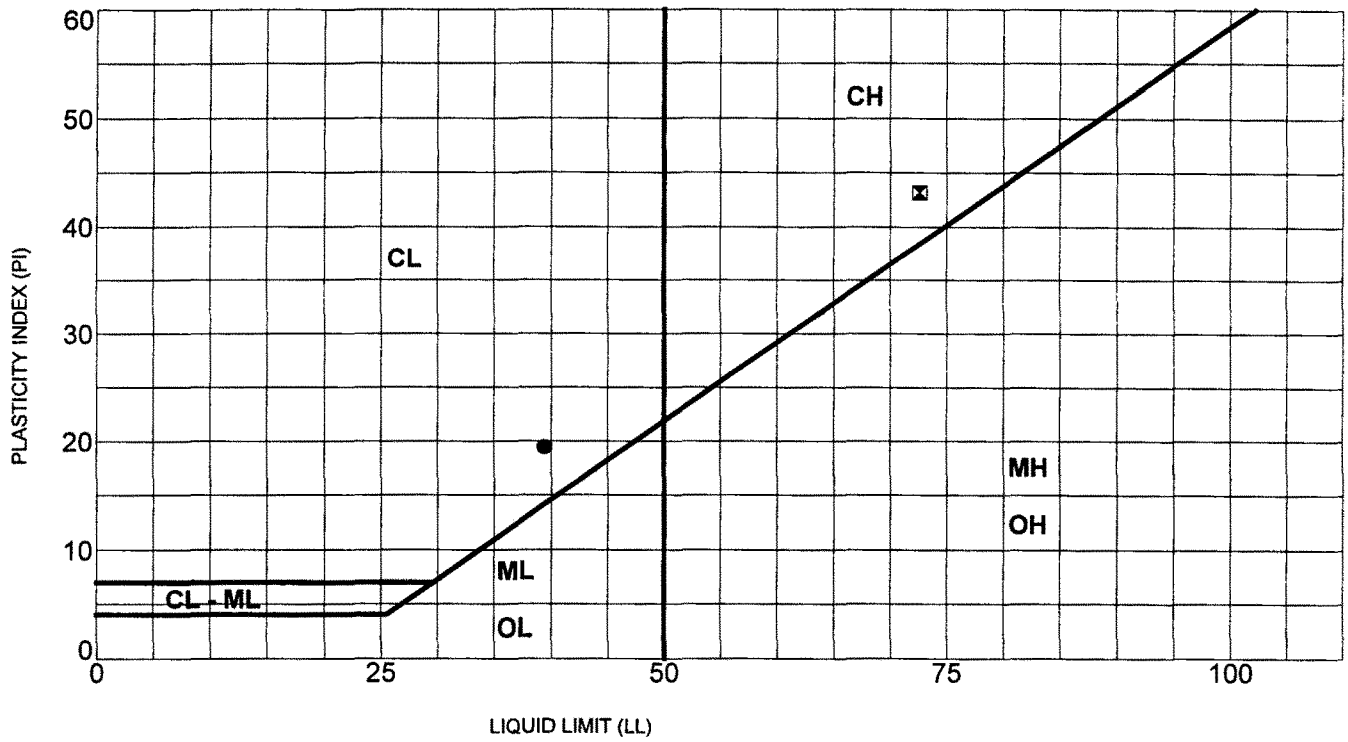
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-74



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-380	3.0	39	20	19	Lean CLAY (CL)
⊠	RB-380	9.1	73	29	43	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

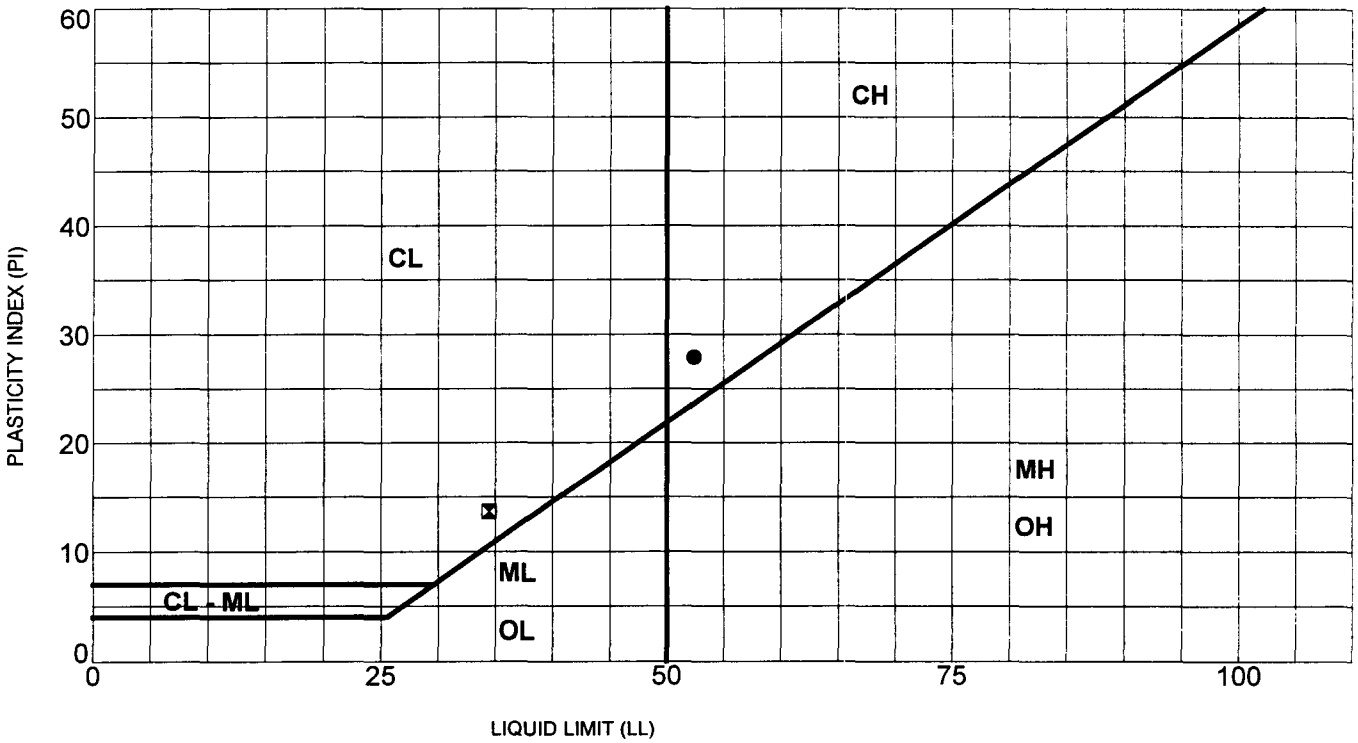
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-75



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-381	6.1	52	24	28	Fat CLAY (CH)
⧗	RB-381	24.4	34	21	14	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

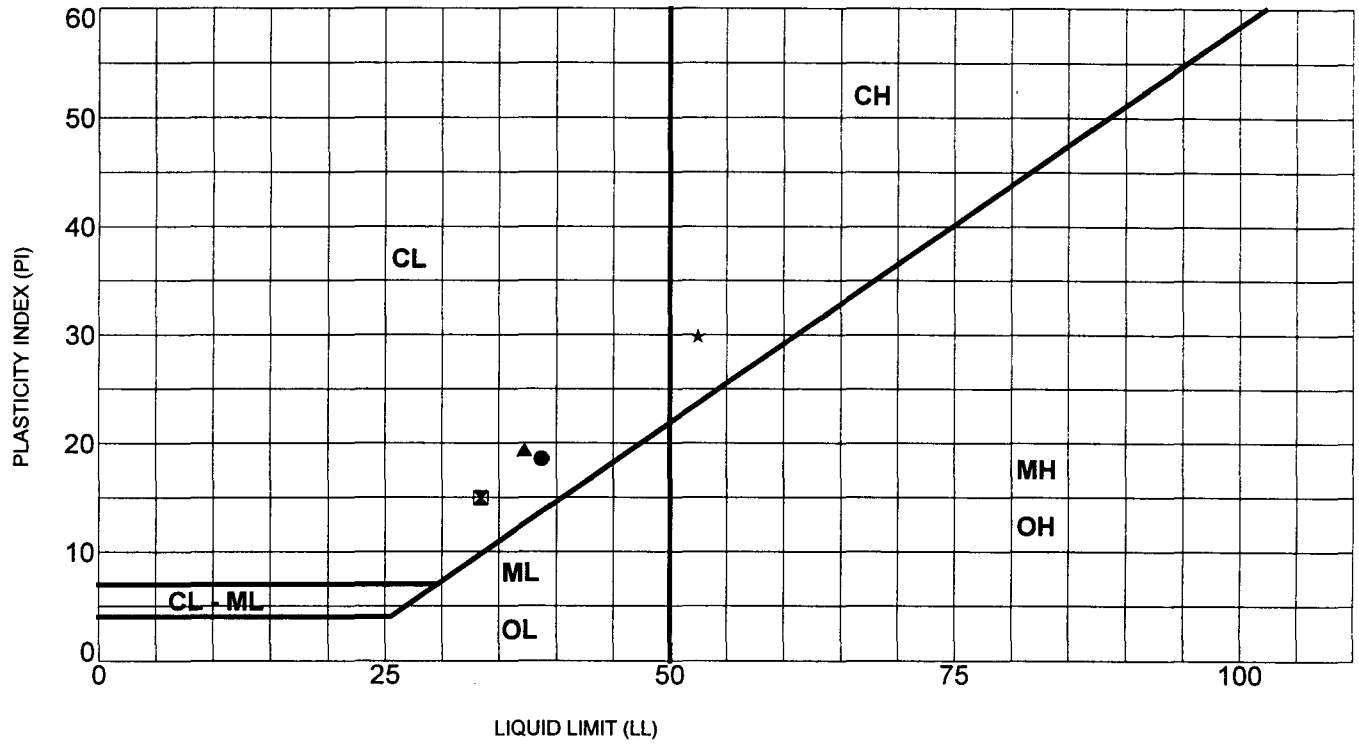
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-76



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-382	1.5	39	20	19	Lean CLAY (CL)
⊠	RB-382	6.7	33	18	15	Lean CLAY (CL)
▲	RB-382	10.7	37	18	19	Lean CLAY (CL)
★	RB-382	13.7	52	23	30	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

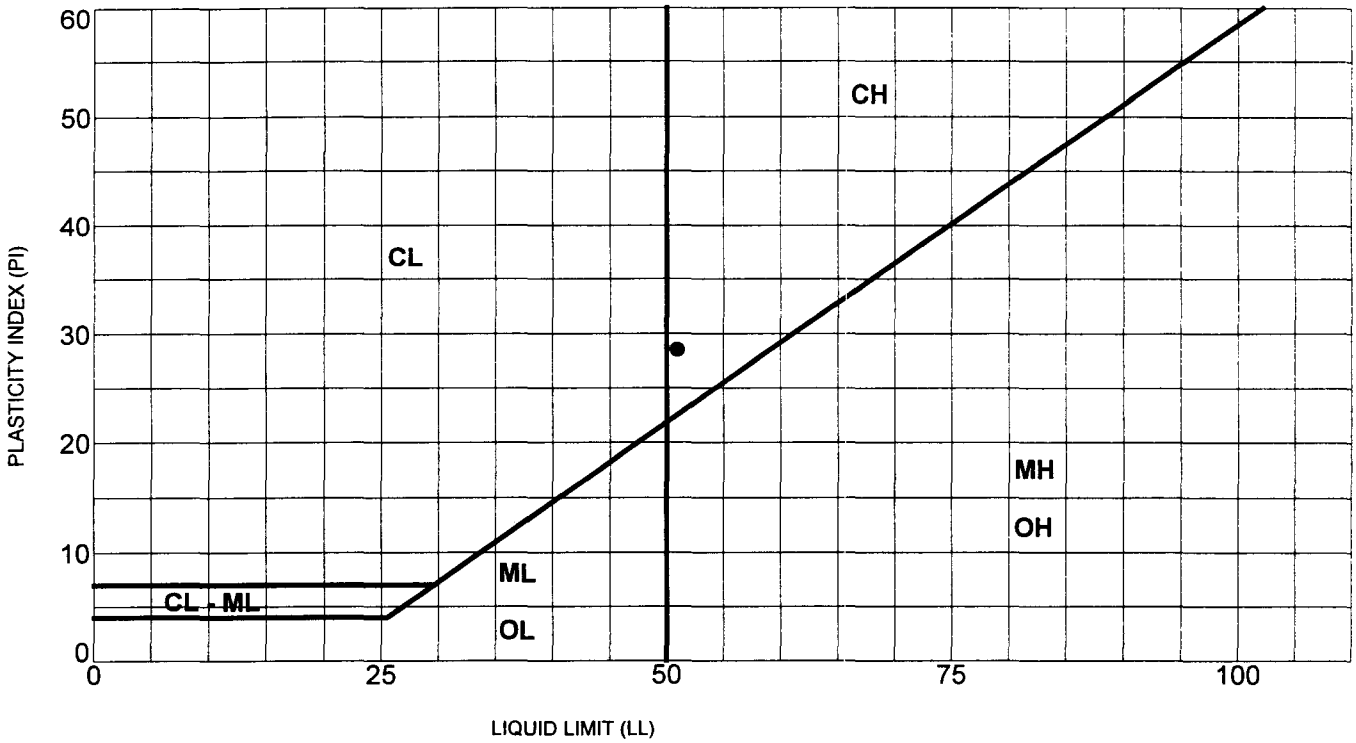
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-77



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-383	6.1	51	22	29	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

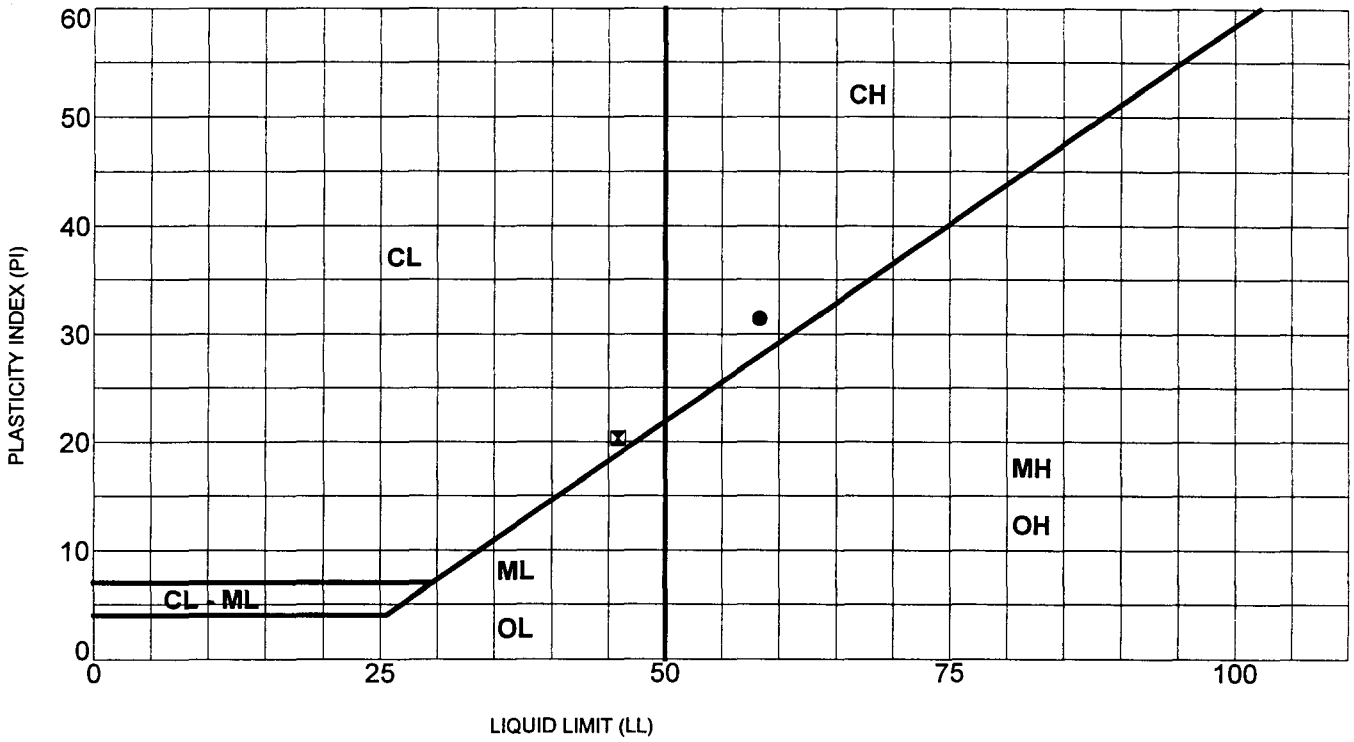
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-78



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-384	7.6	58	27	31	Fat CLAY (CH)
⊠	RB-384	15.2	46	25	20	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

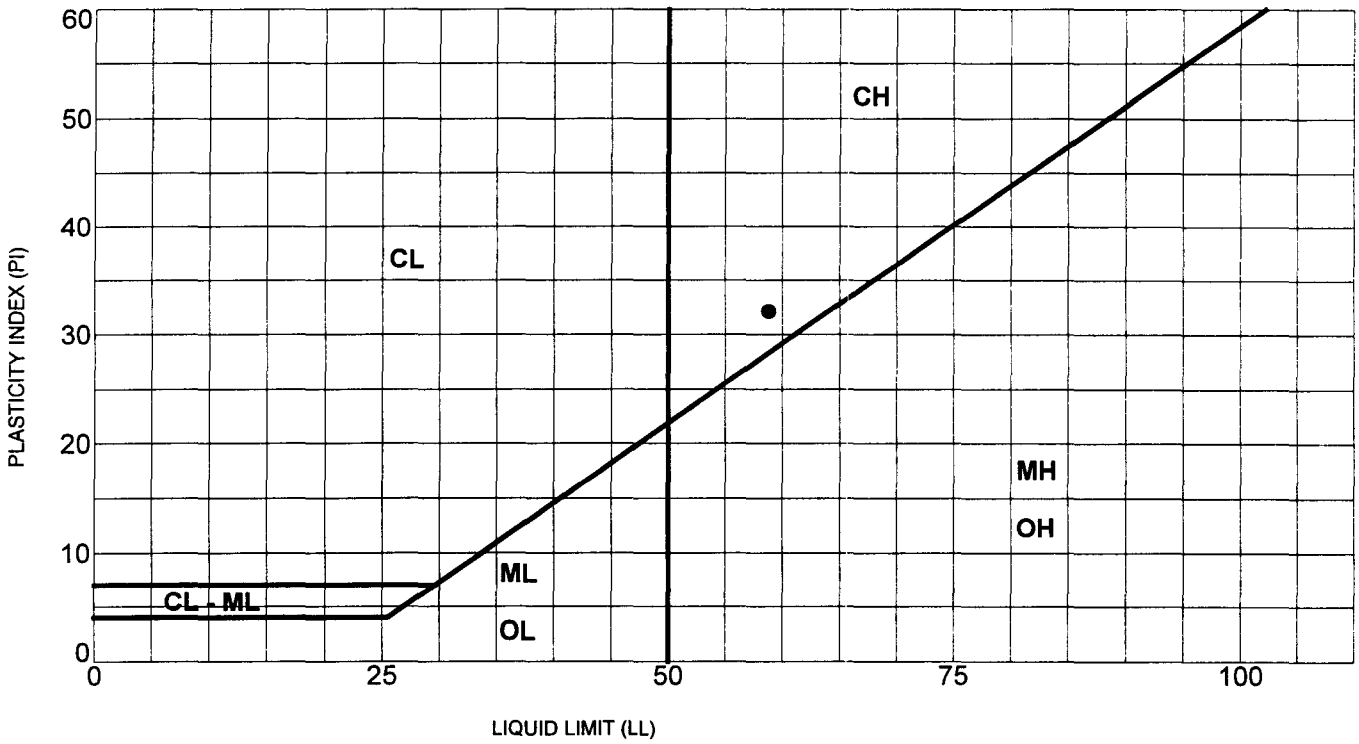
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-79



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-385	21.3	59	27	32	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

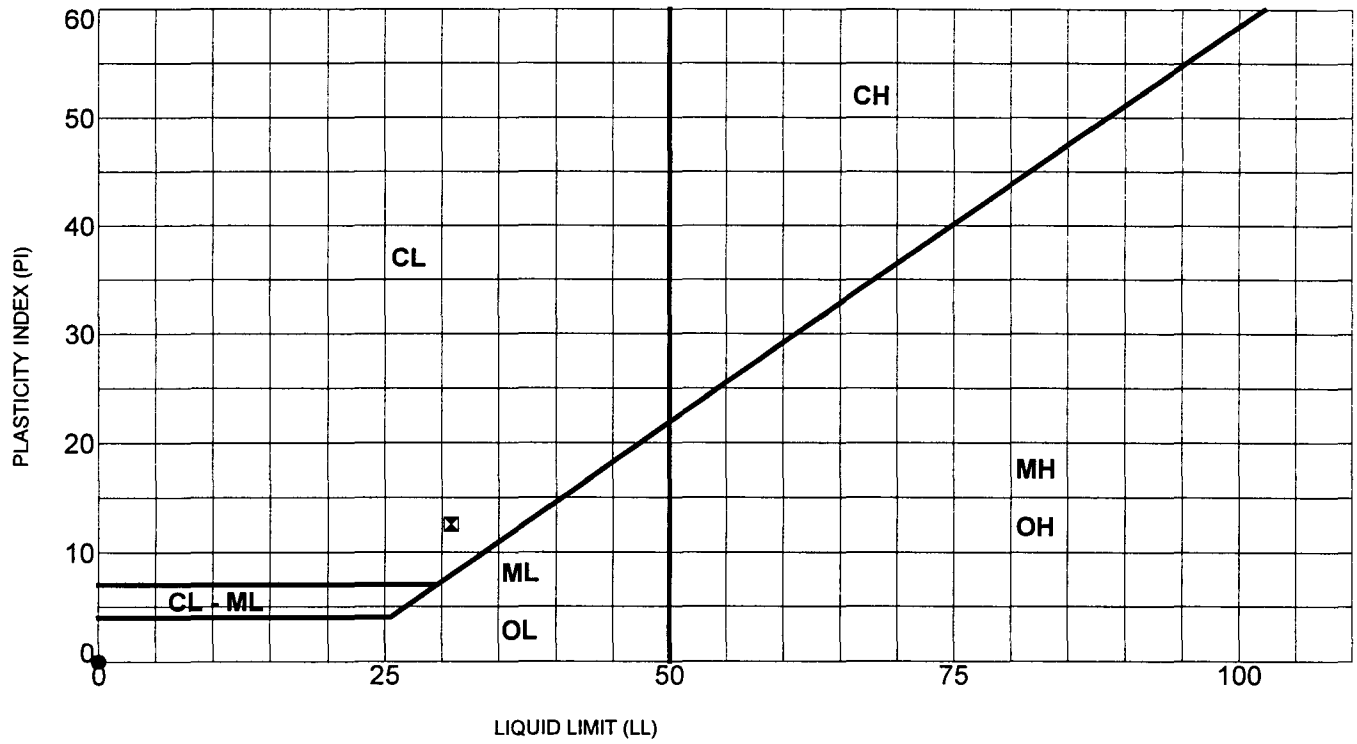
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLA

PLASTICITY CHART



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-386	4.6	NP	NP	NP	Sandy SILT (ML)
⧗	RB-386	10.7	31	18	13	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

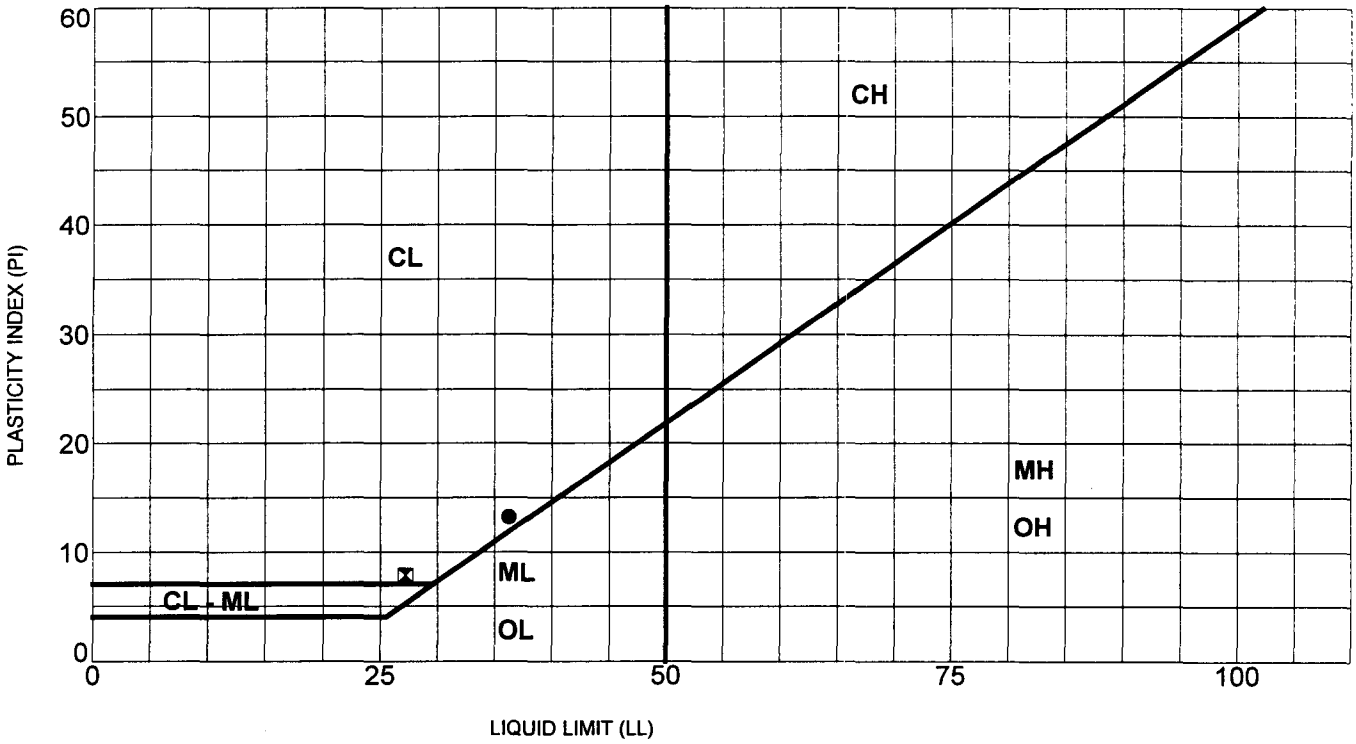
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-81



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-388	9.1	36	23	13	Lean CLAY (CL)
⊠	RB-388	22.9	27	19	8	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

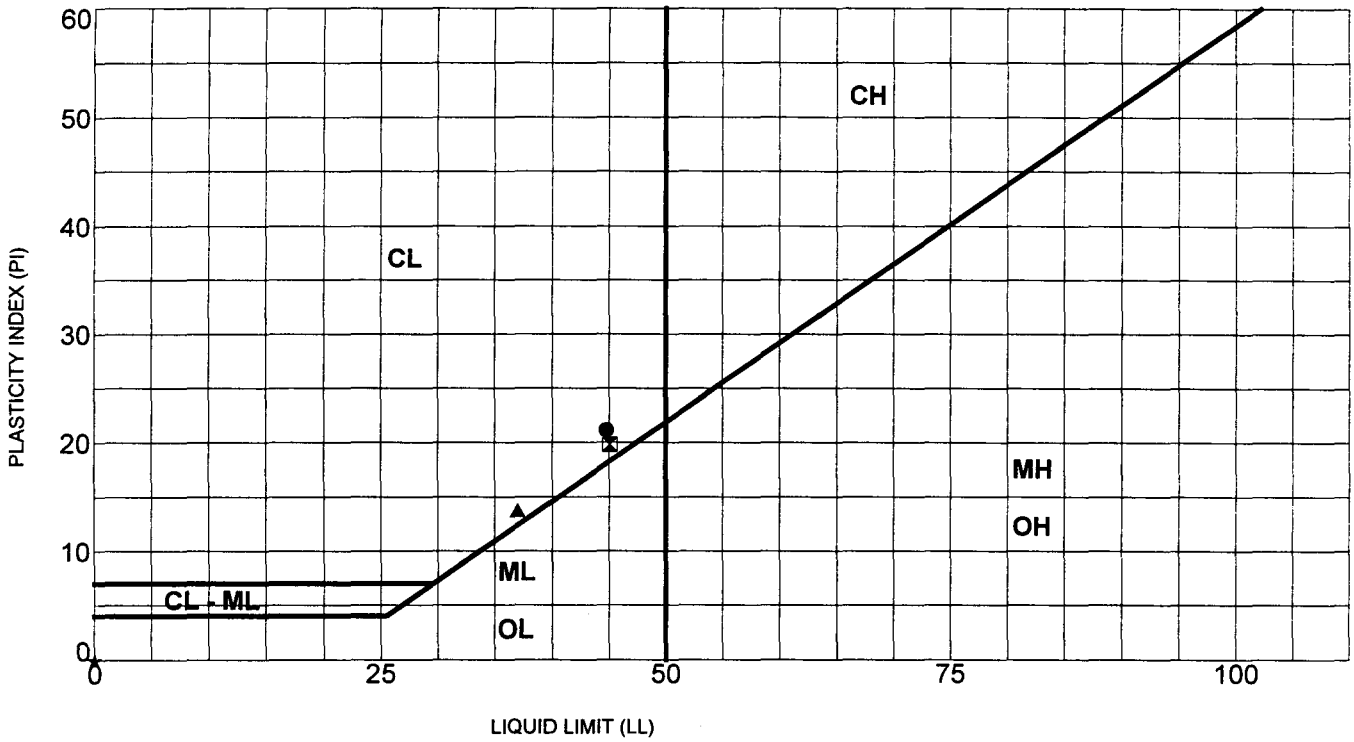
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-82



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-389	1.5	45	24	21	Lean CLAY (CL)
⊠	RB-389	4.6	45	25	20	Lean CLAY (CL)
▲	RB-389	9.1	37	23	14	Sandy Lean CLAY (CL)
★	RB-389	22.9	NP	NP	NP	Sandy SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

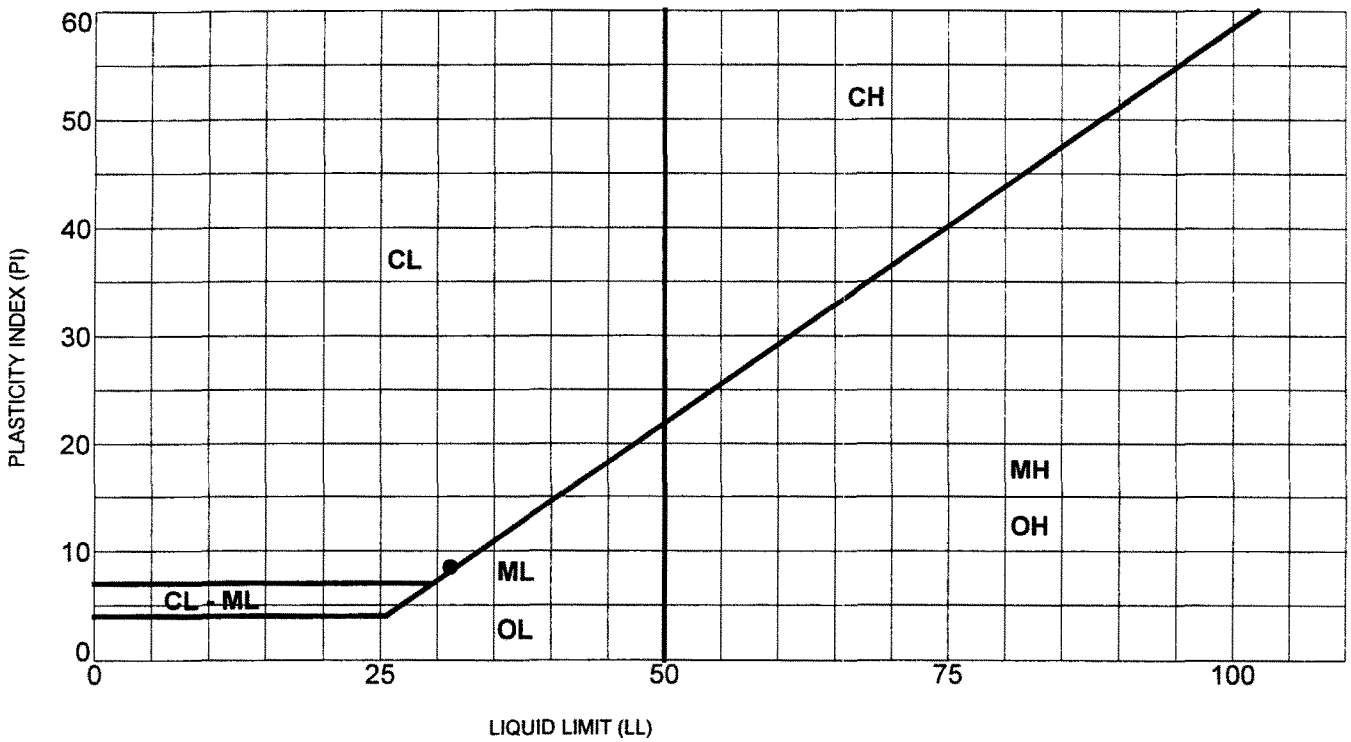
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-83



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-390	8.8	31	23	9	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

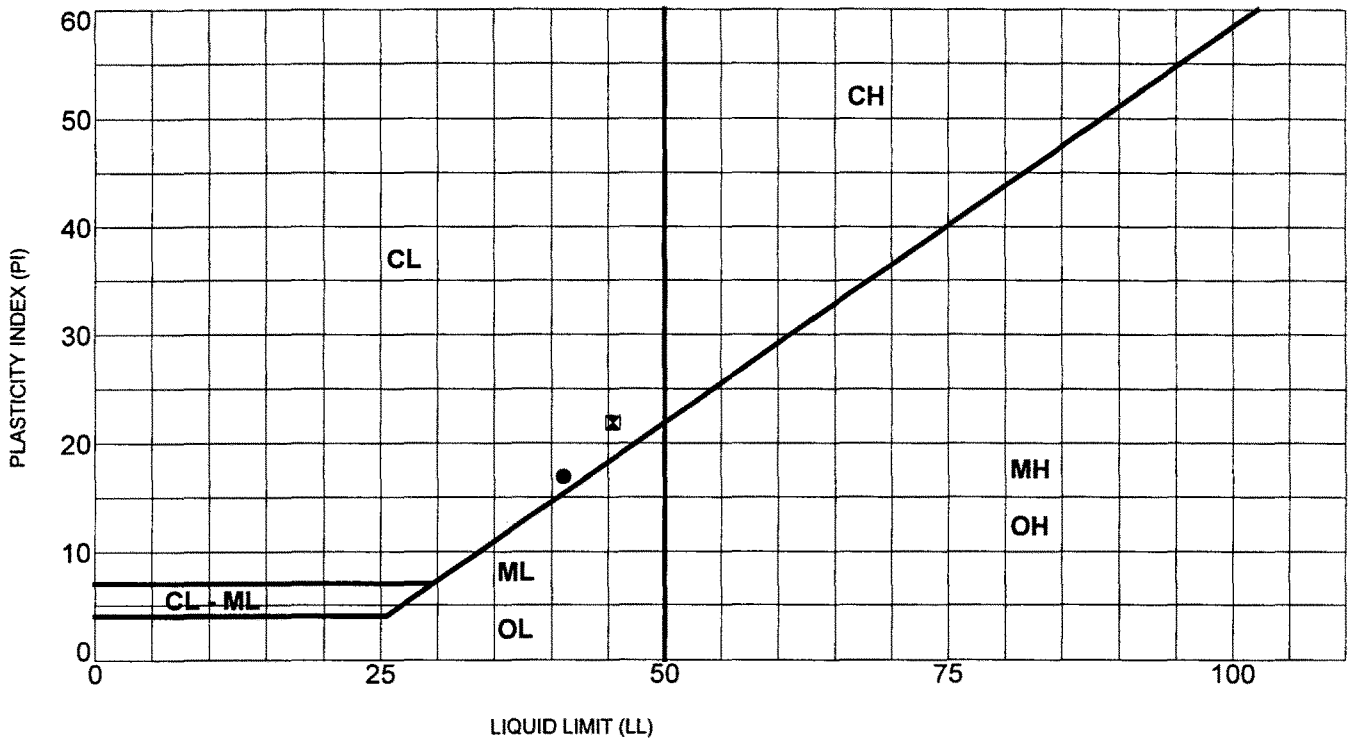
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-84



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-392	6.1	41	24	17	Lean CLAY (CL)
⊠	RB-392	25.9	45	24	22	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

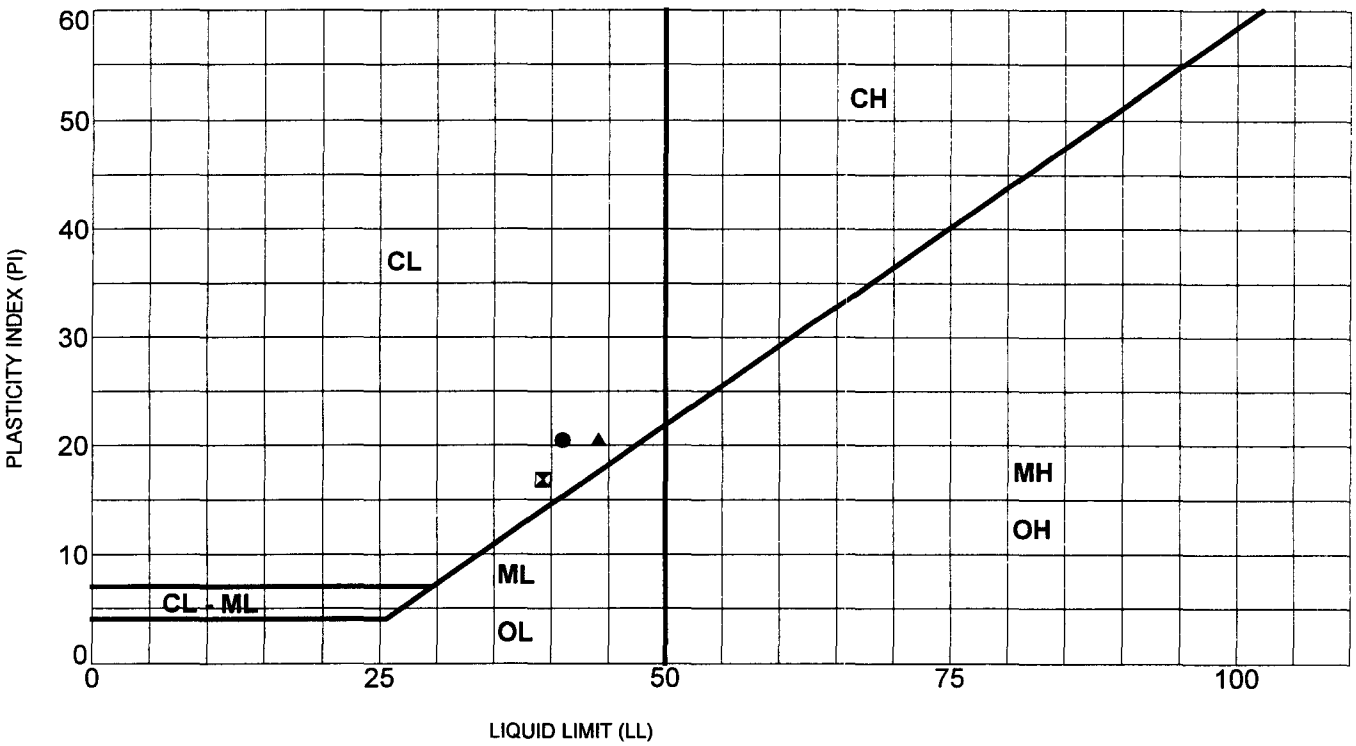
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-85



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-393	3.0	41	21	20	Lean CLAY (CL)
⊠	RB-393	6.1	39	22	17	Lean CLAY (CL)
▲	RB-393	15.2	44	24	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

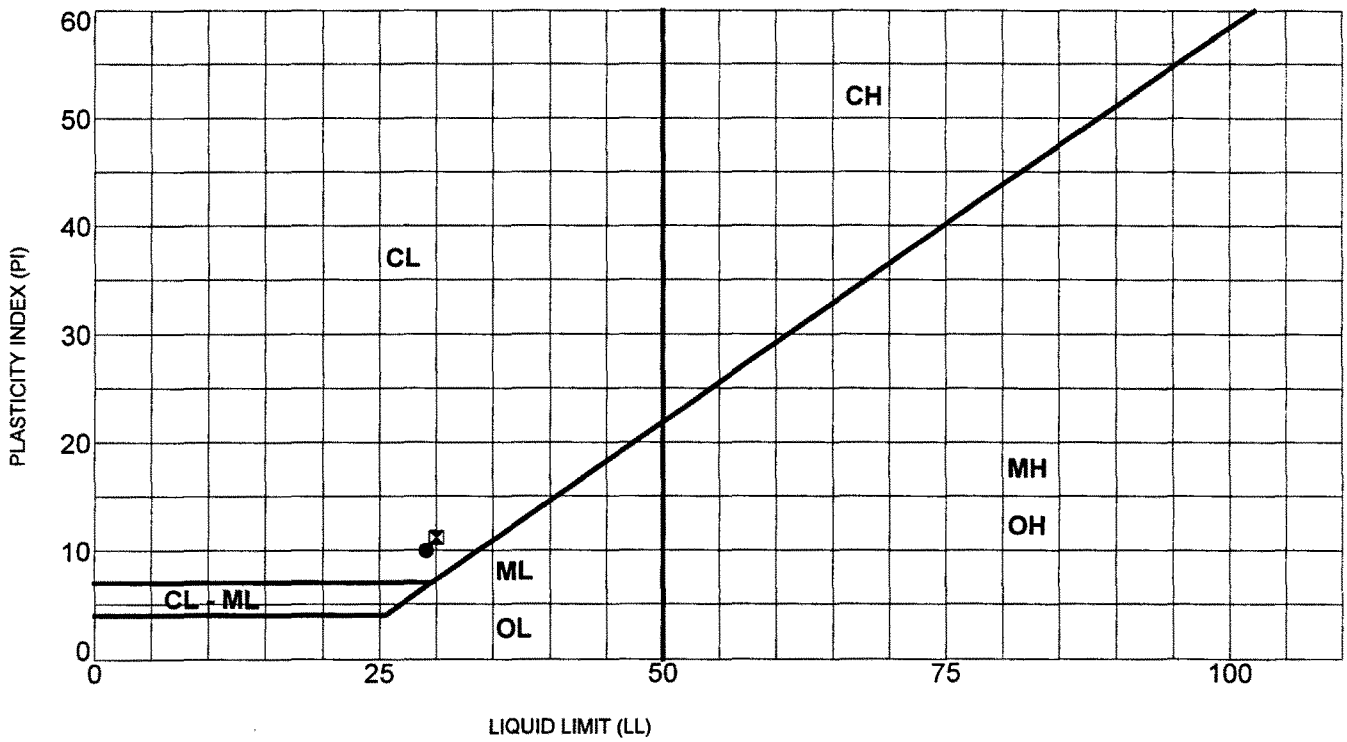
KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE
K-86



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-394	2.1	29	19	10	Lean CLAY (CL)
⊠	RB-394	7.6	30	19	11	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

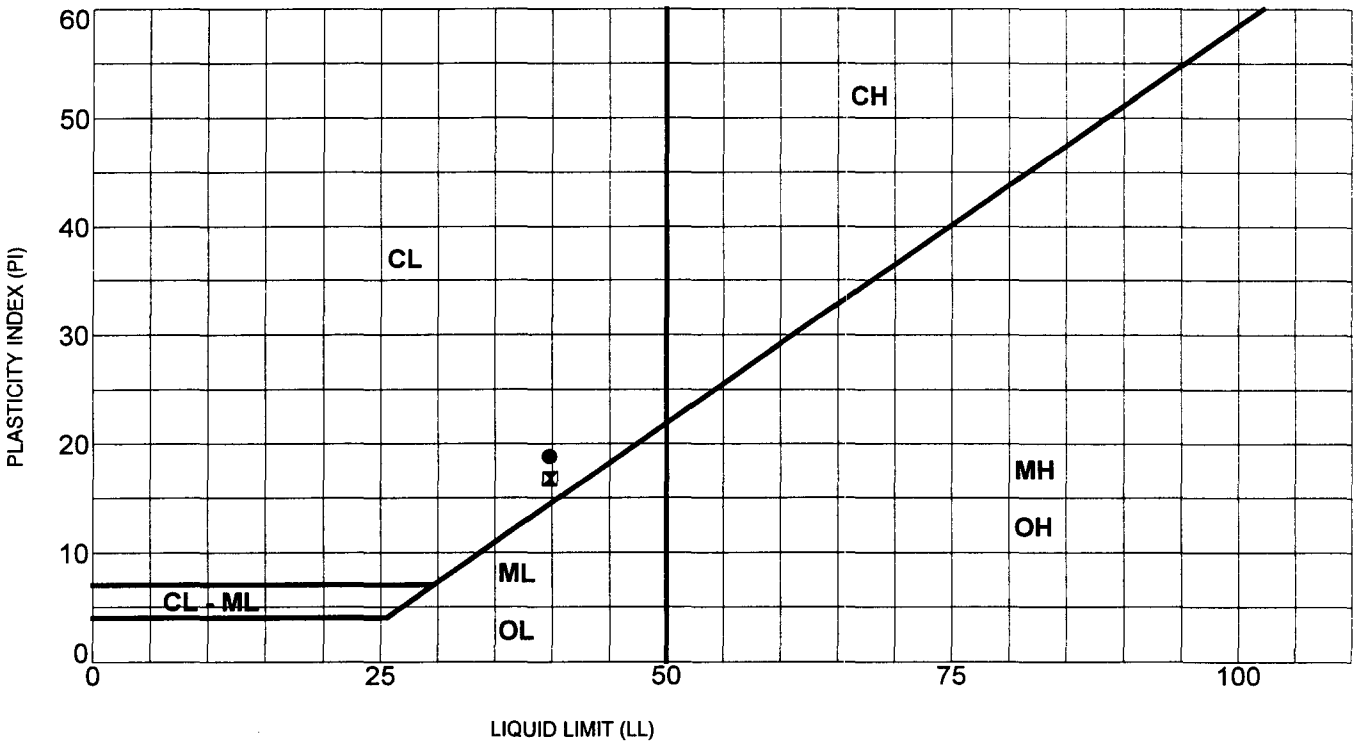
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-87



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-395	1.5	40	21	19	Lean CLAY (CL)
⊠	RB-395	4.6	40	23	17	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

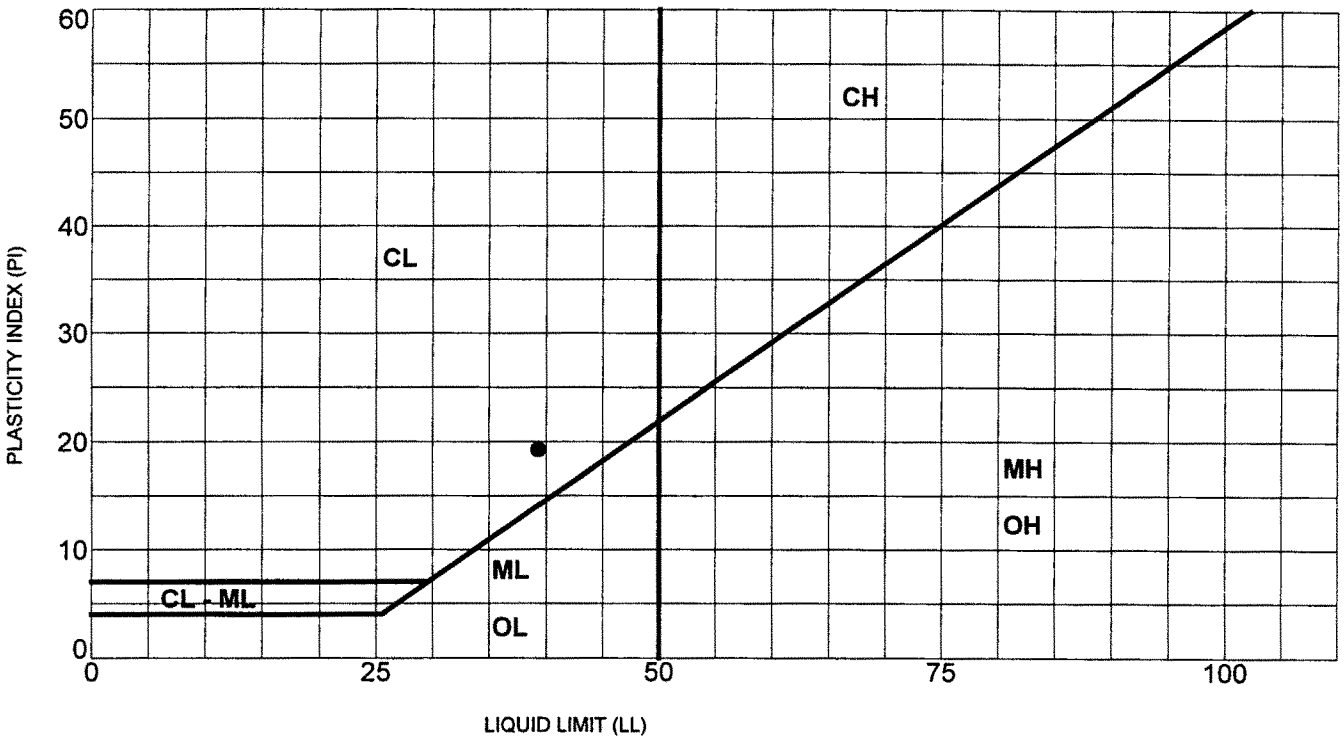
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-88



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-396	3.0	39	20	19	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

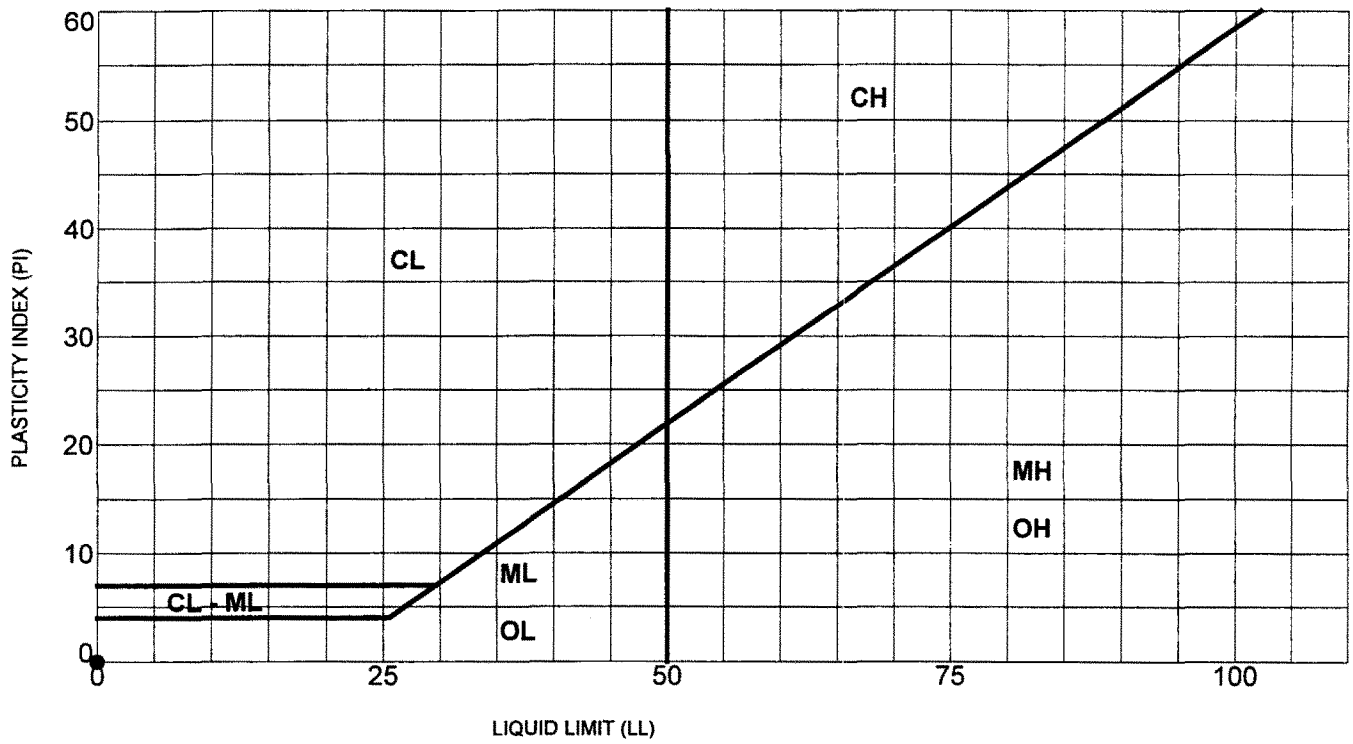
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-89



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-397	7.6	NP	NP	NP	Sandy SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

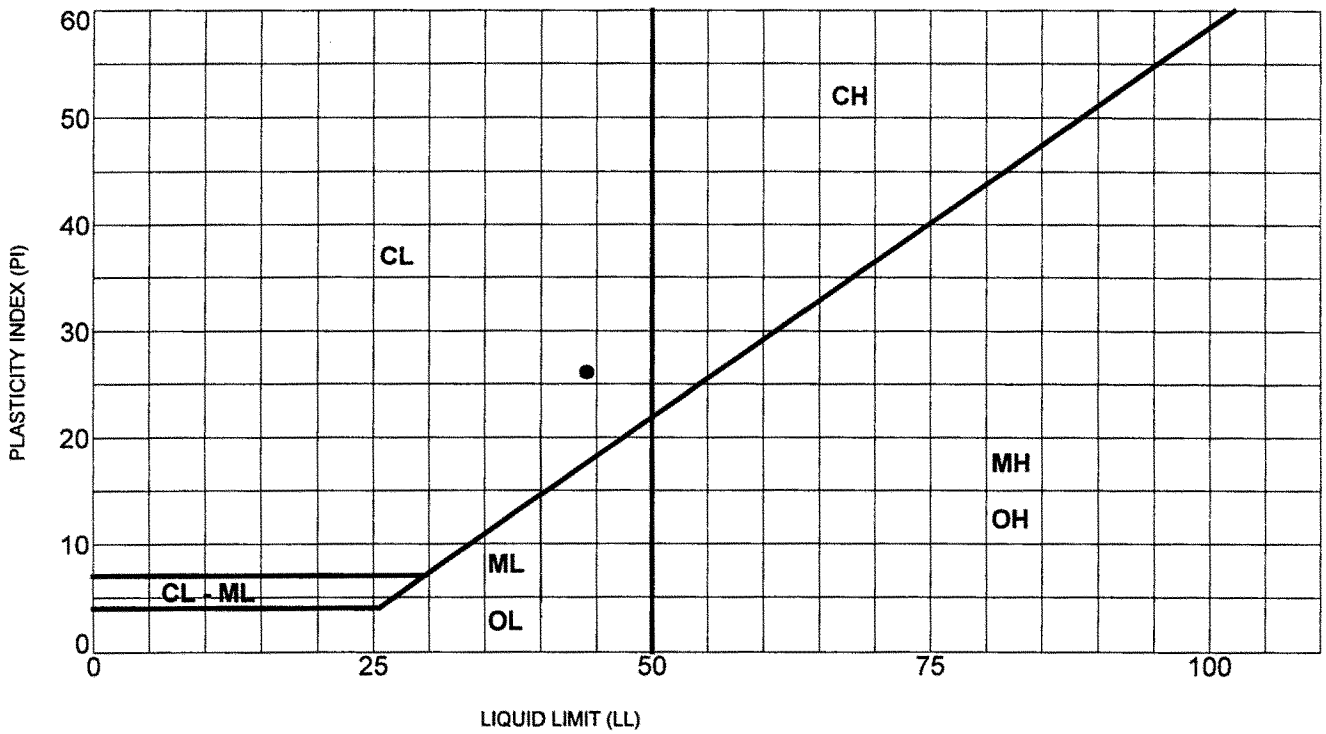
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-90



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-398	4.6	44	18	26	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

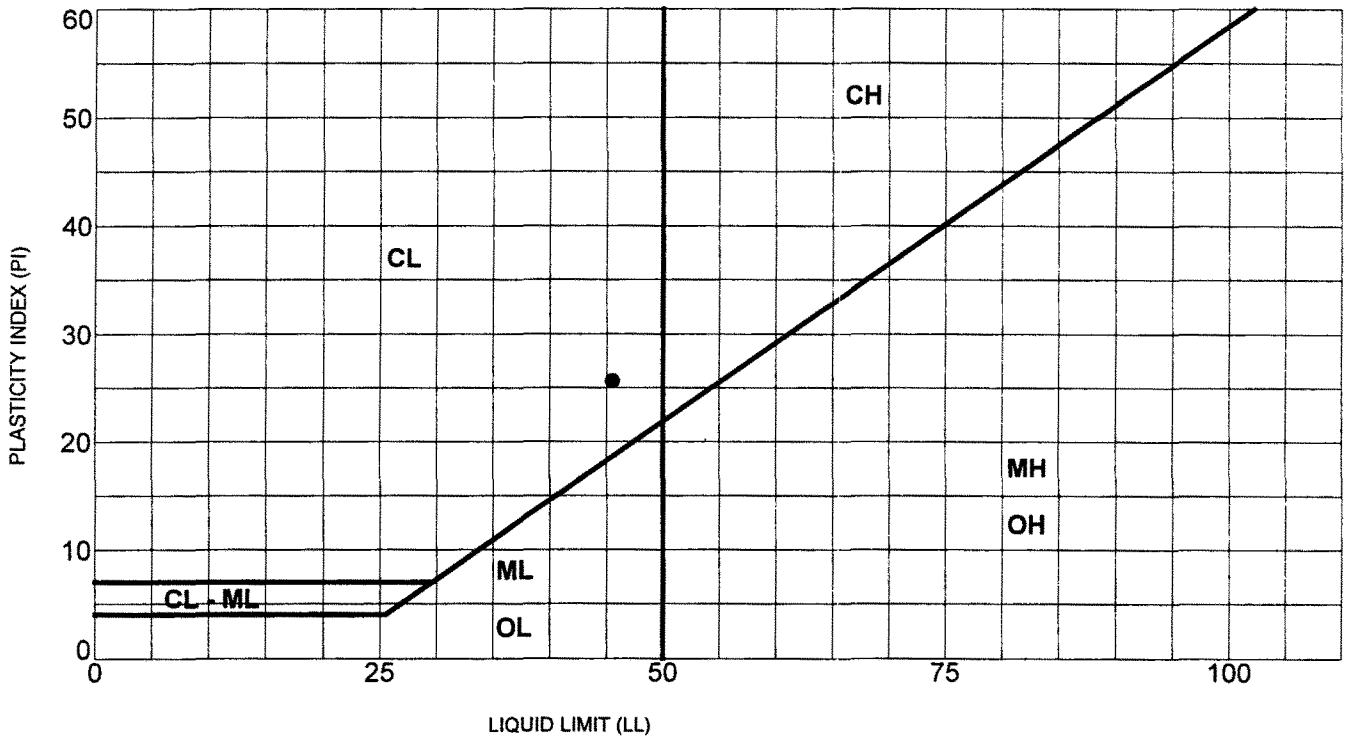
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-91



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-399	4.6	46	20	26	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

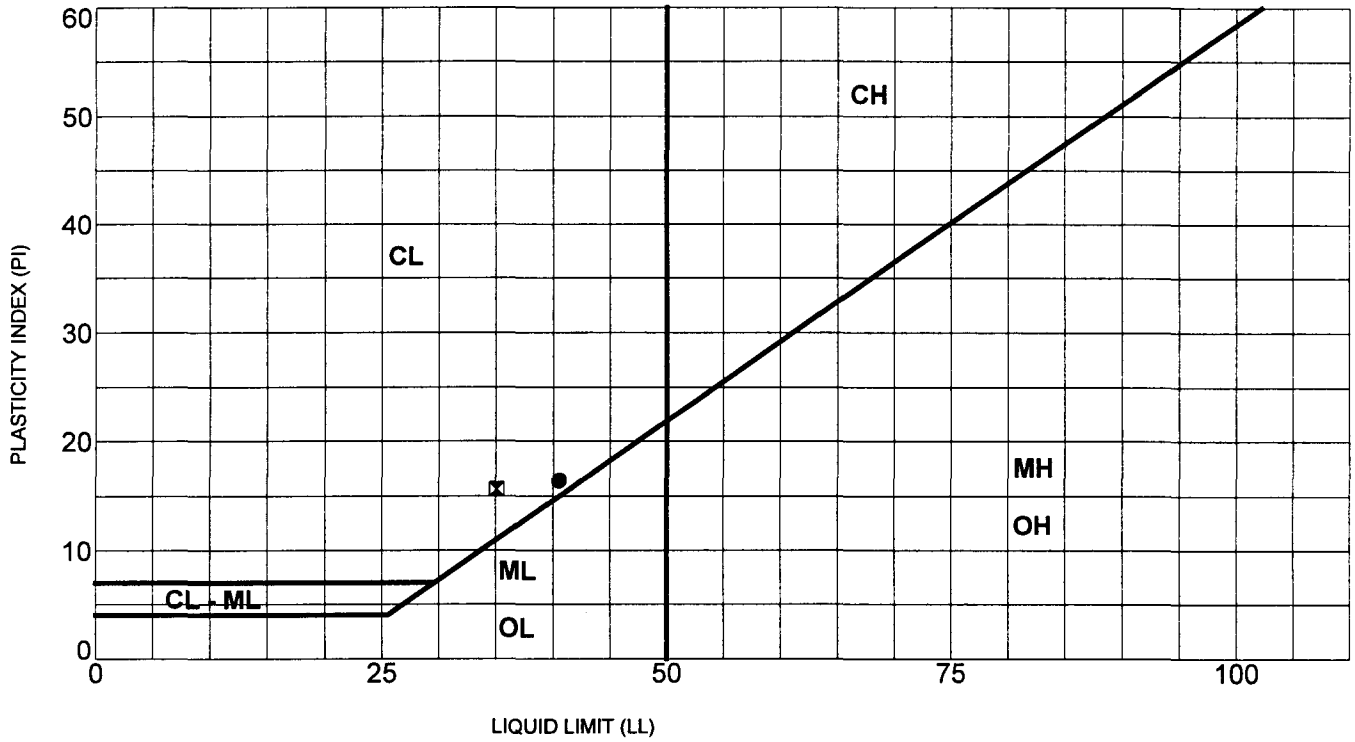
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-92



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-400	2.1	41	24	16	Lean CLAY (CL)
⊠	RB-400	4.6	35	19	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

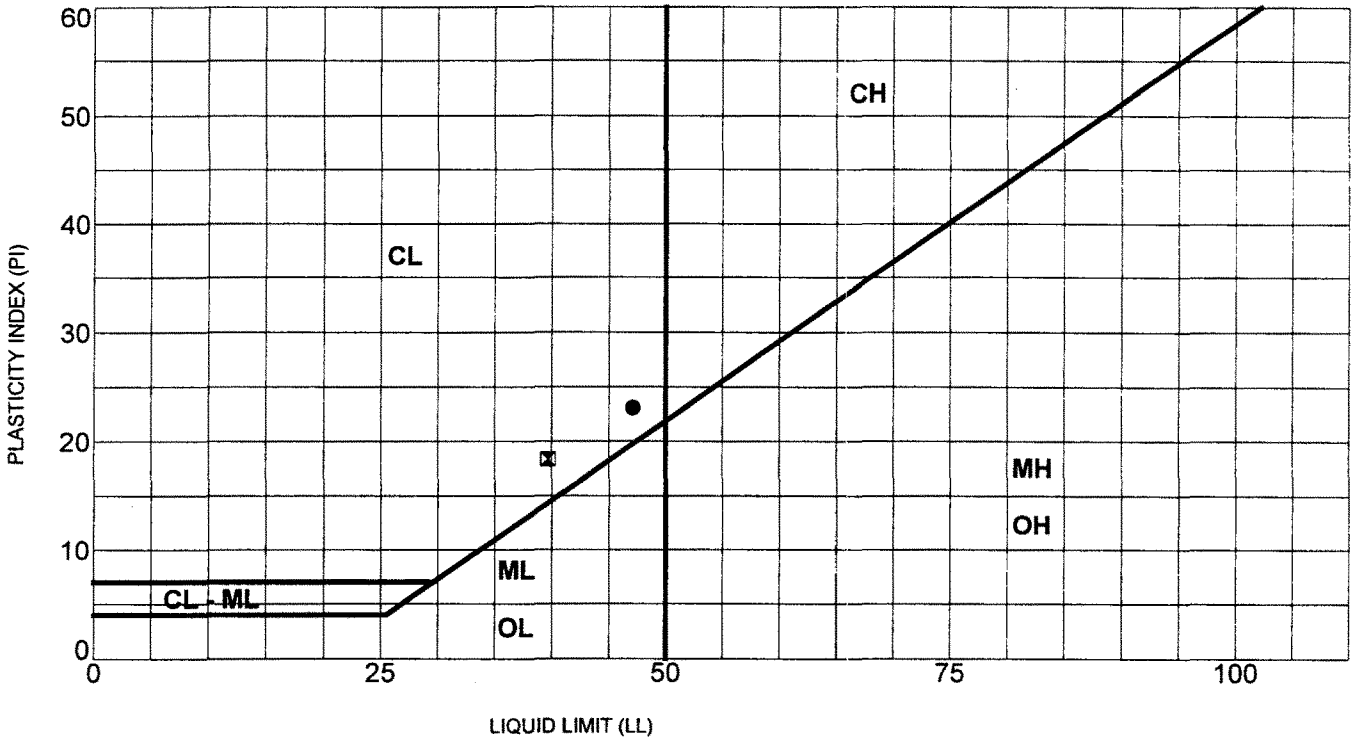
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-93



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-402	1.5	47	24	23	Lean CLAY (CL)
⊠	RB-402	6.1	40	21	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

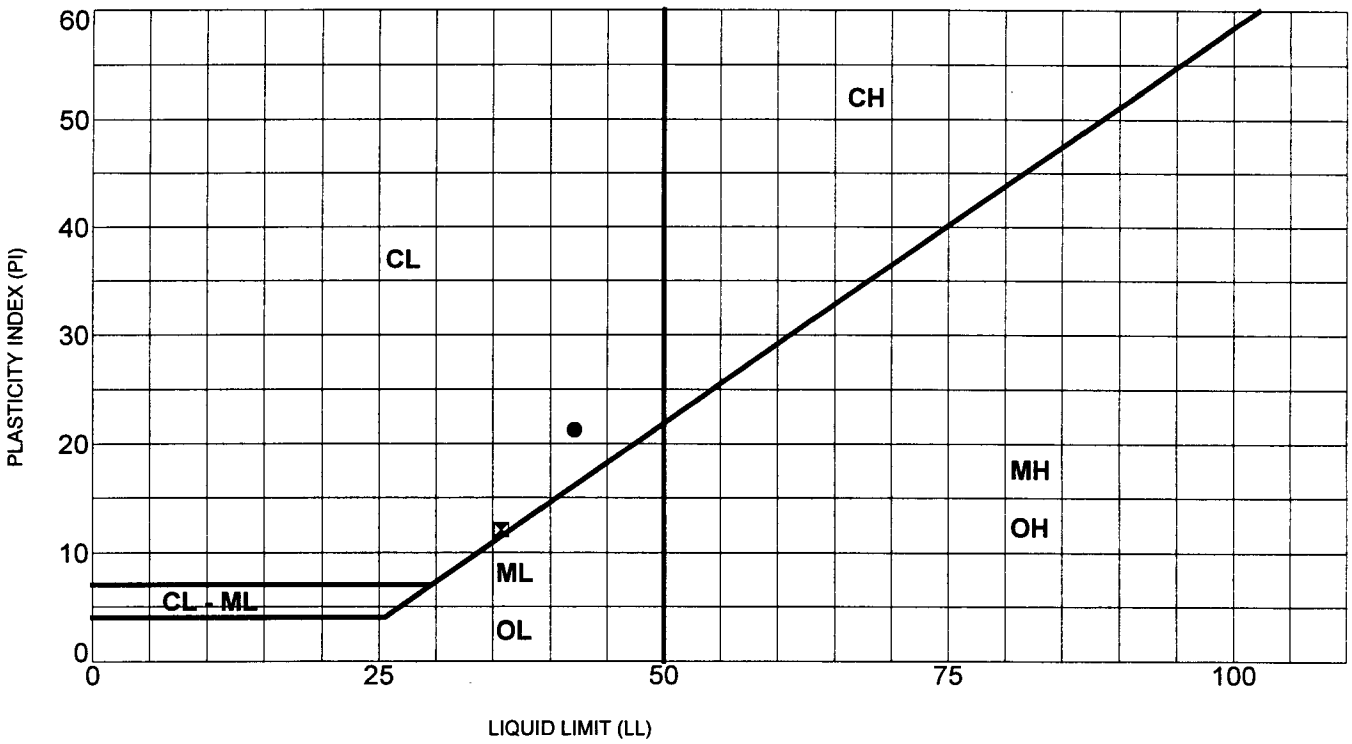
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-94



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-403	1.5	42	21	21	Lean CLAY (CL)
⊠	RB-403	3.7	36	24	12	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

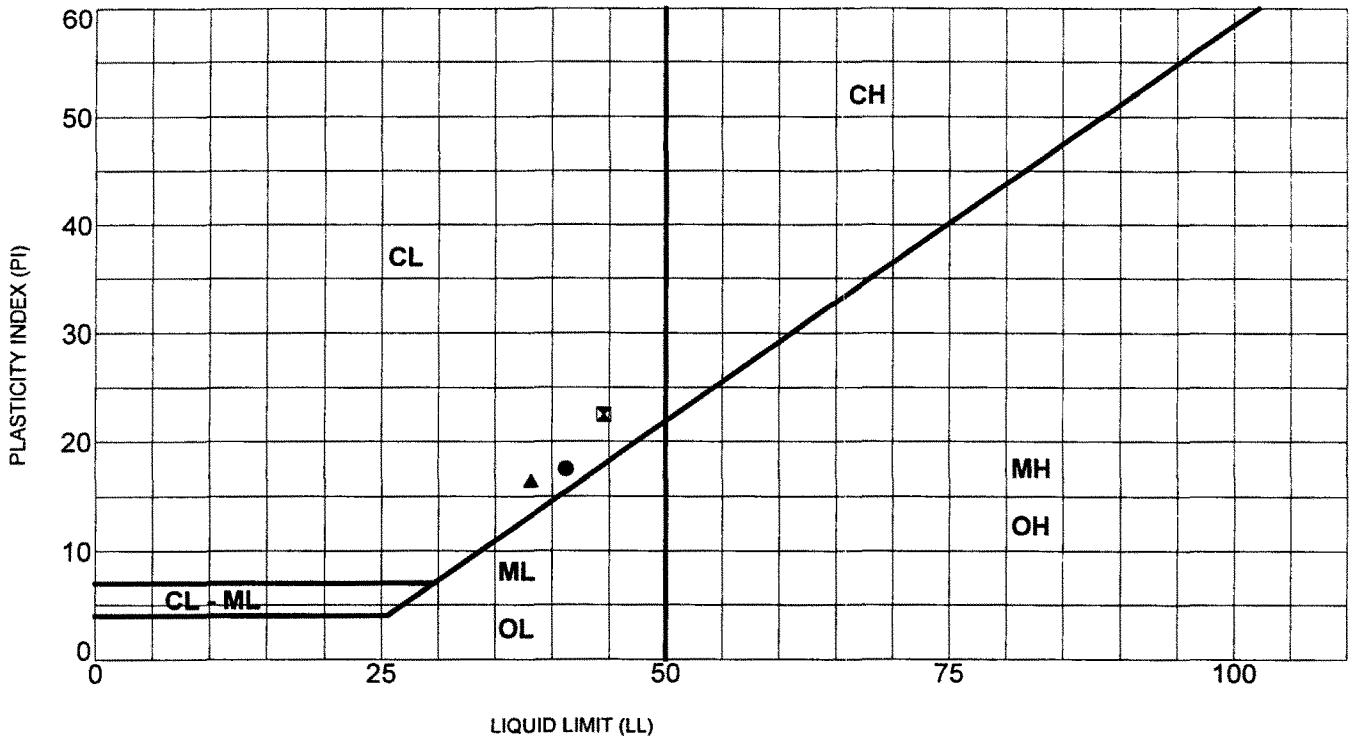
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-95



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-404	1.5	41	24	18	Lean CLAY (CL)
⊠	RB-404	4.6	45	22	23	Lean CLAY (CL)
▲	RB-404	4.9	38	22	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

PROJECT NO. 35-8163-05

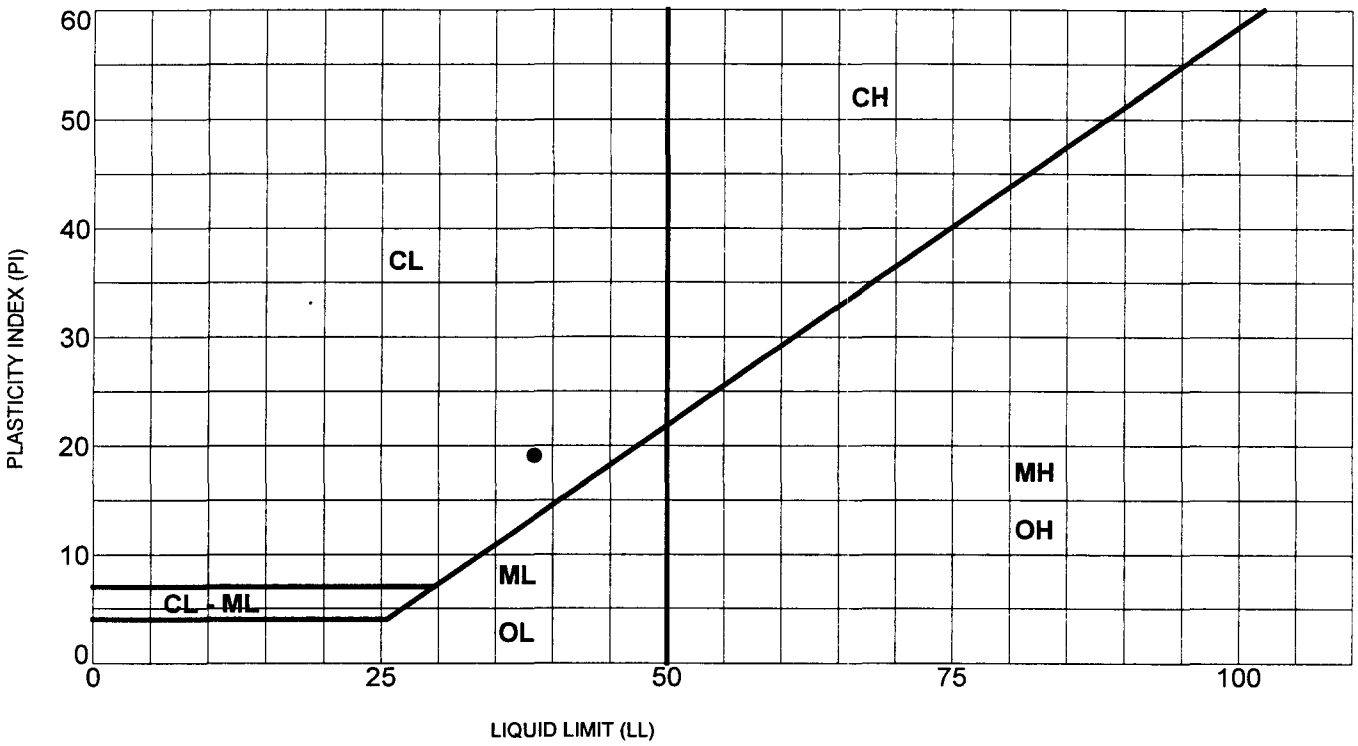
I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-96

(This page left blank intentionally.)



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-406	4.6	38	19	19	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

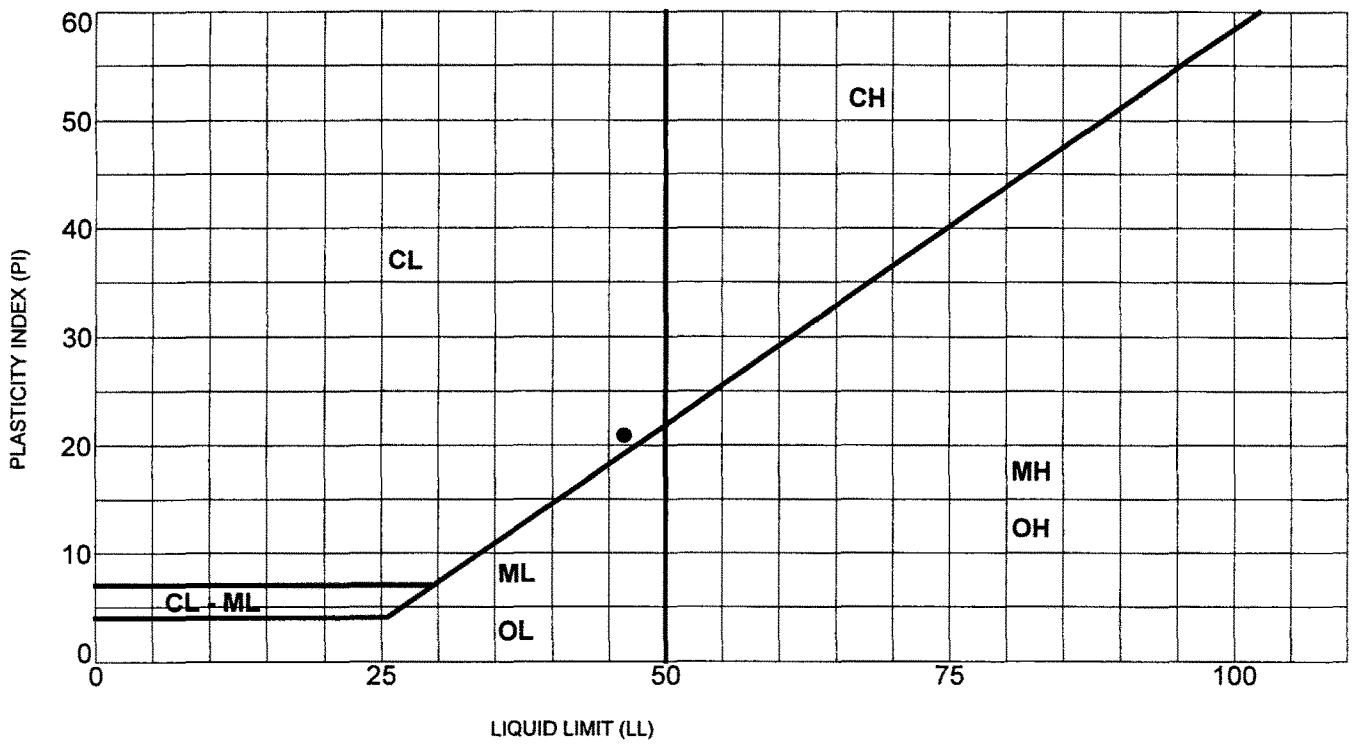
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-98



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-407	7.6	46	25	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

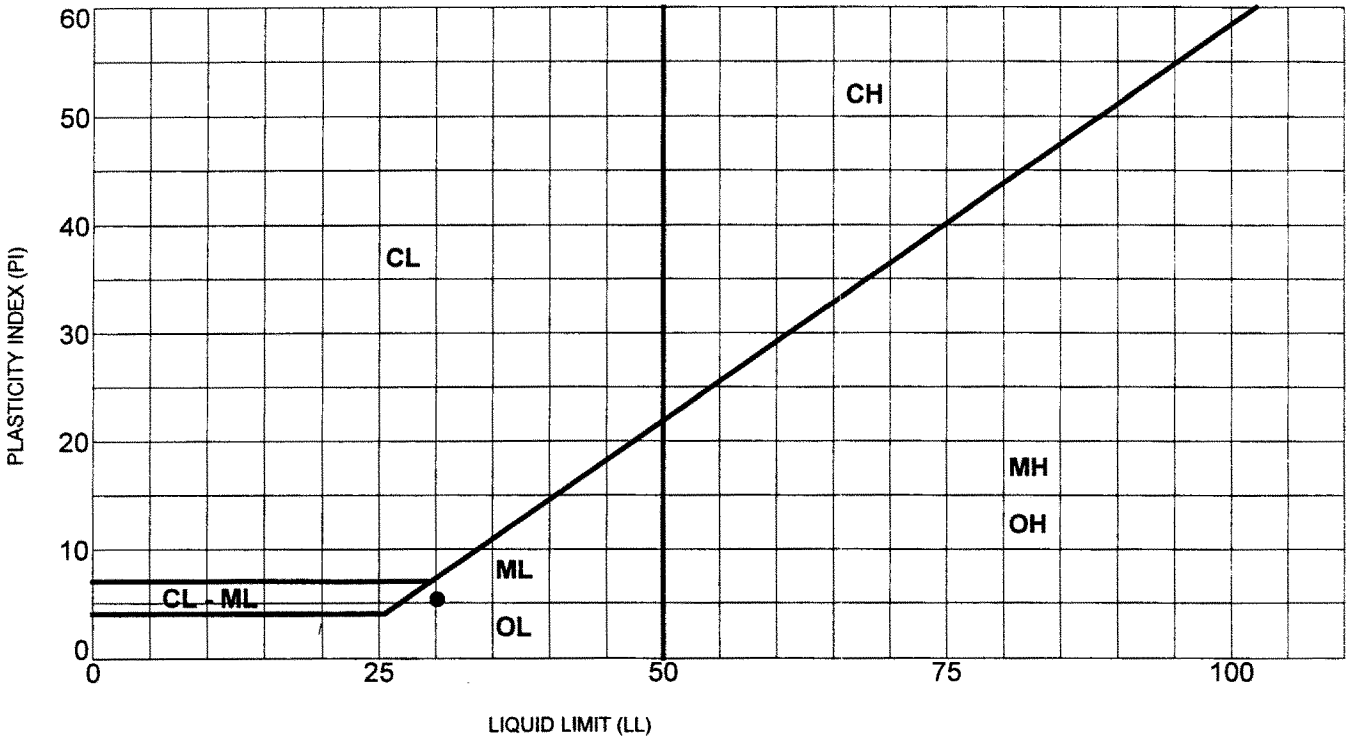
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-99



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-408	1.5	30	25	5	SILT with sand (ML)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

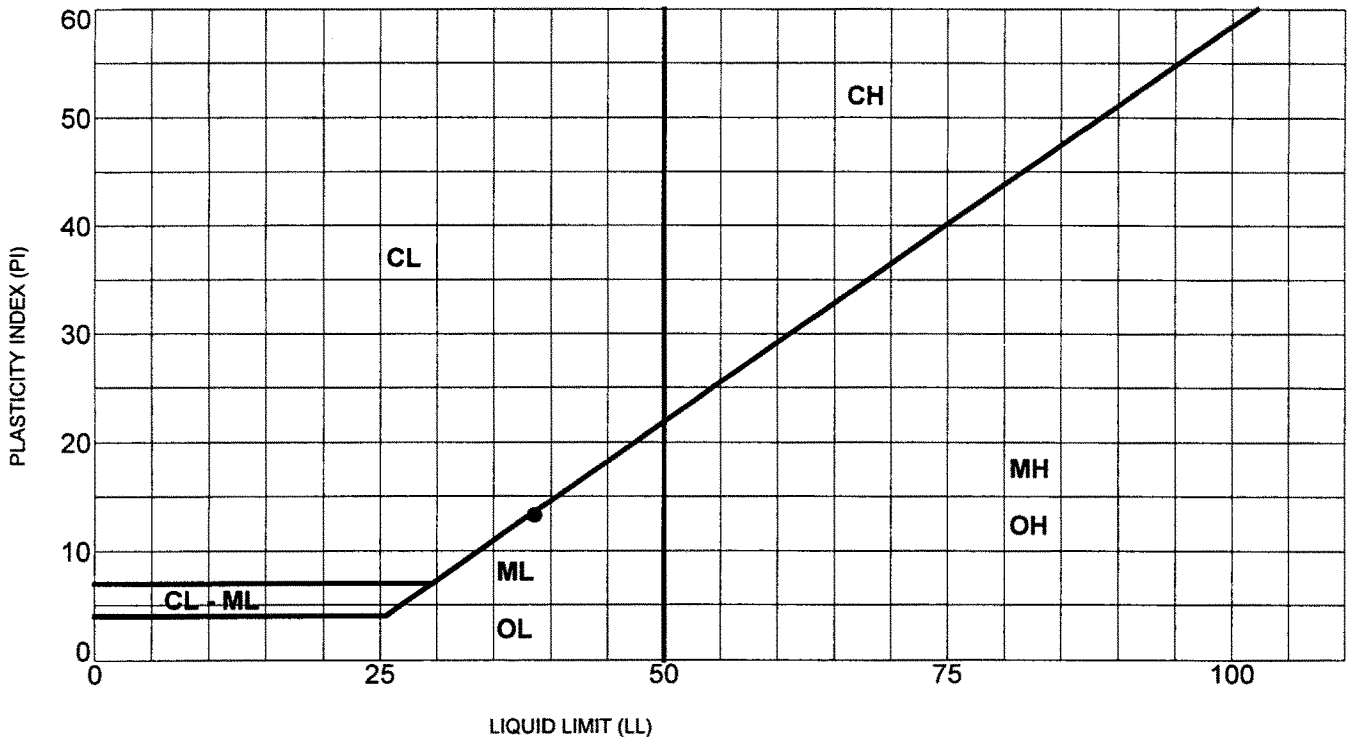
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-100



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-409	1.5	39	25	13	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

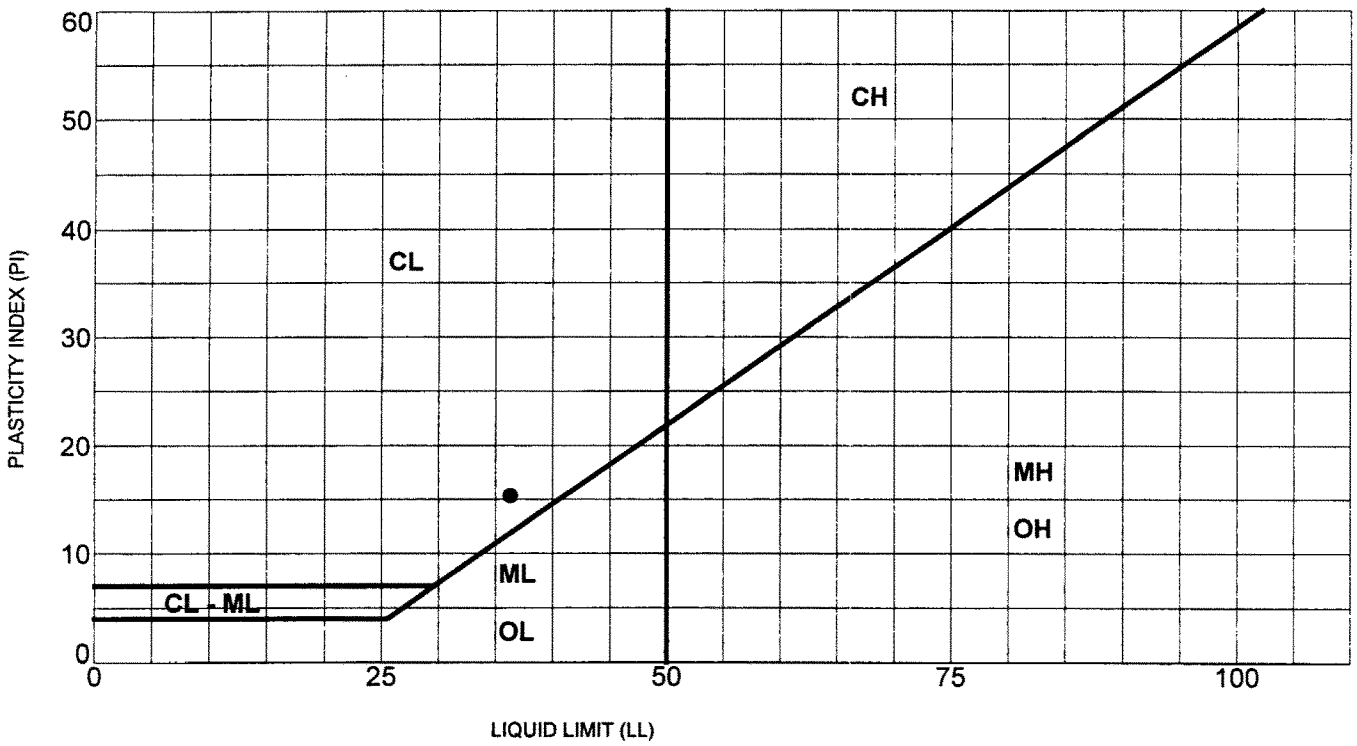
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-101



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-410	1.5	36	21	15	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

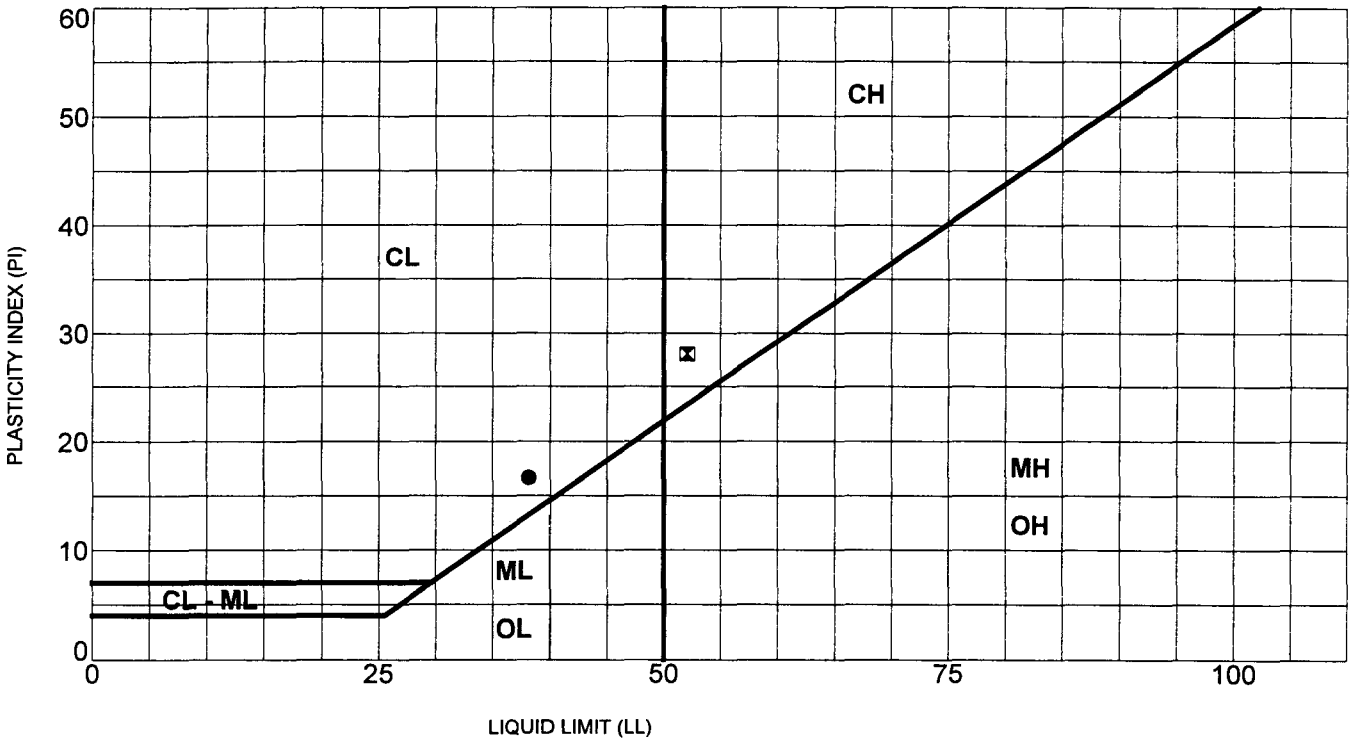
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-102



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-411	1.5	38	22	17	Lean CLAY (CL)
⊠	RB-411	8.2	52	24	28	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

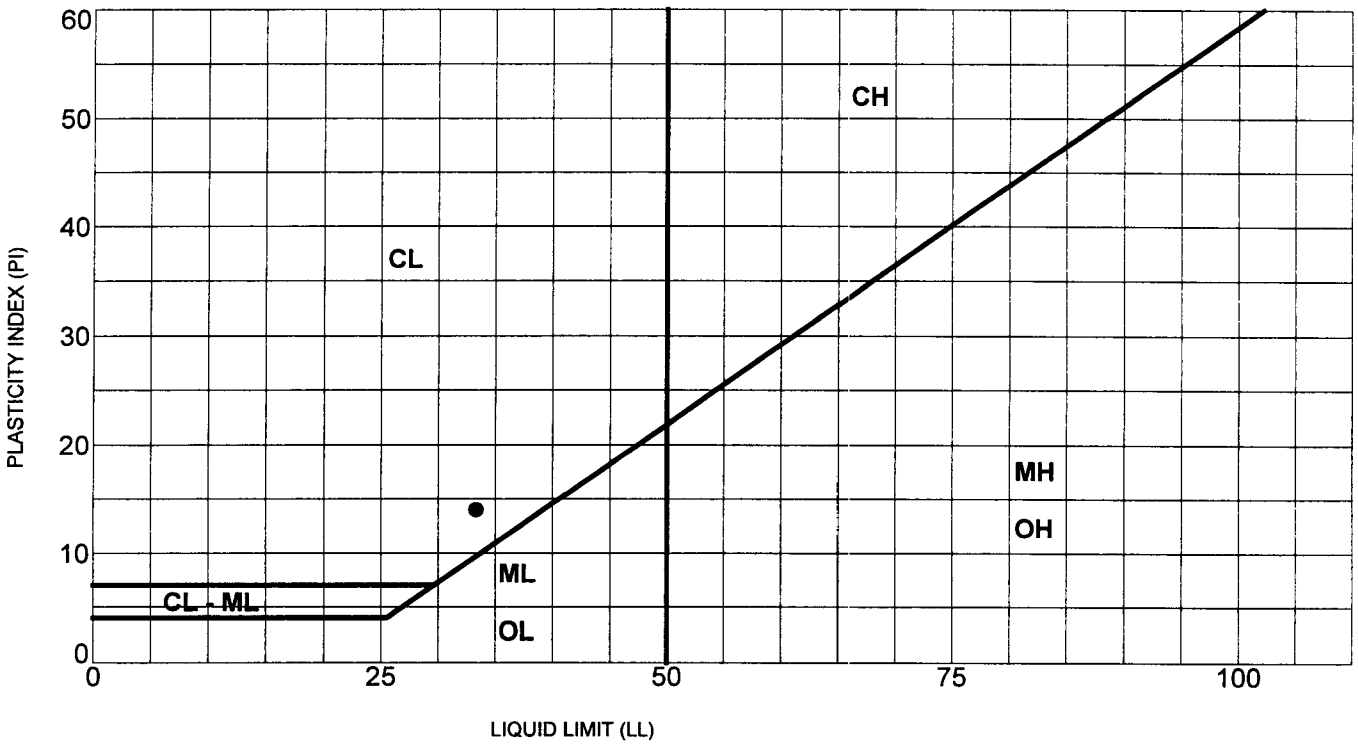
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-103



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-412	4.6	33	19	14	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

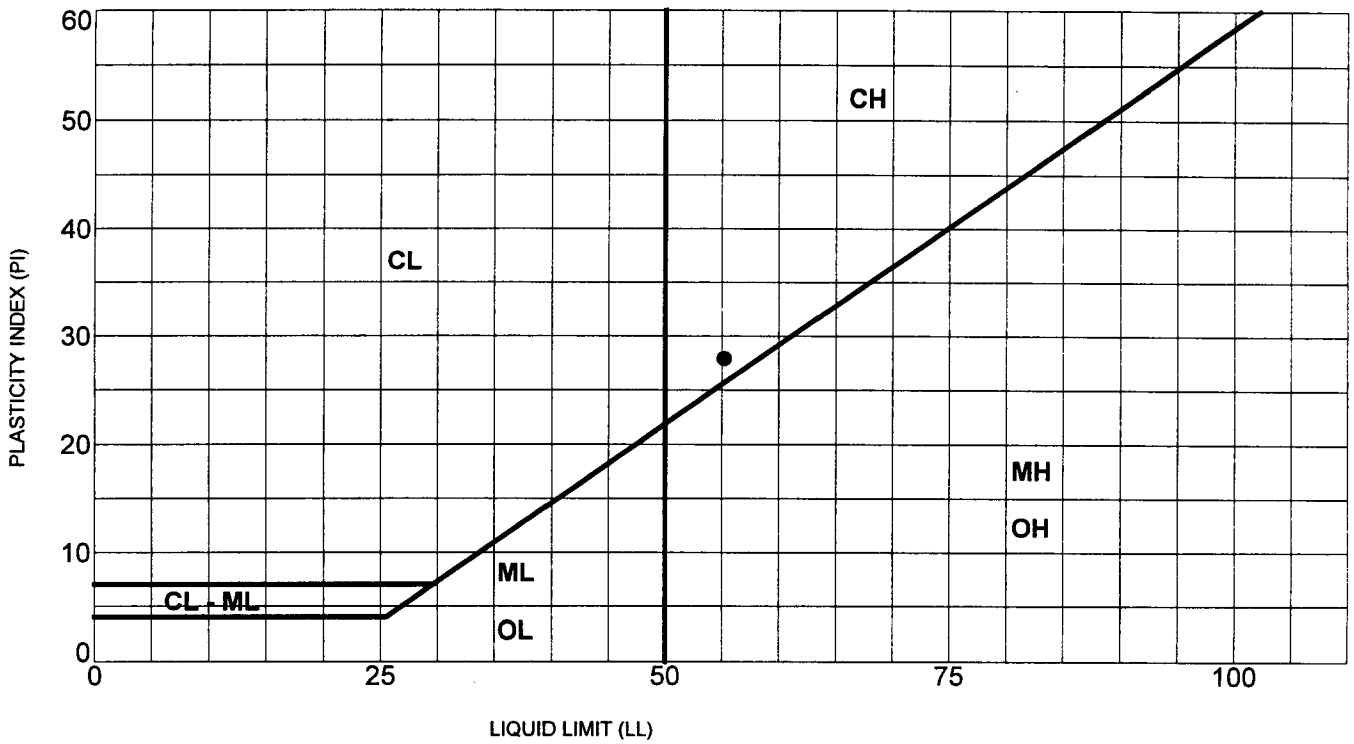
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-104



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-413	7.6	55	27	28	Fat CLAY (CH)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

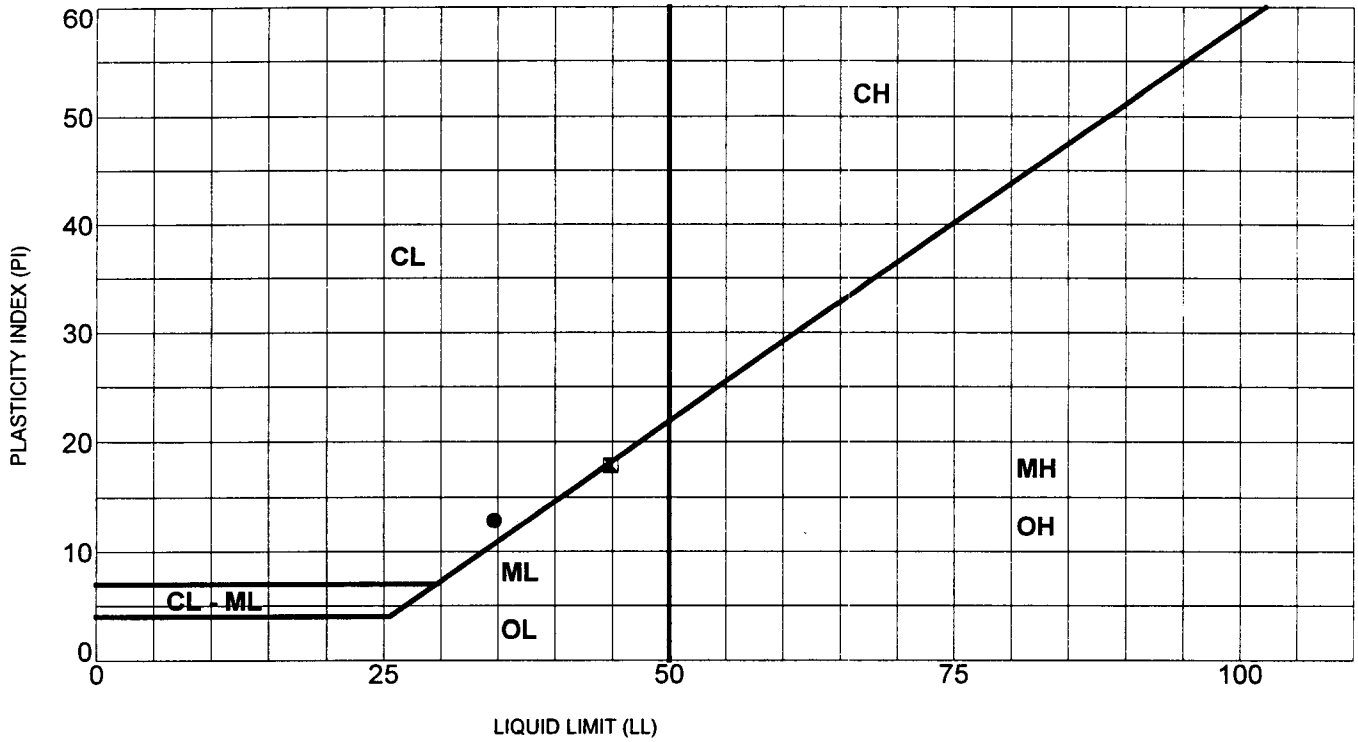
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-105



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-414	1.5	35	22	13	Lean CLAY (CL)
⊠	RB-414	7.6	45	27	18	SILT (ML)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

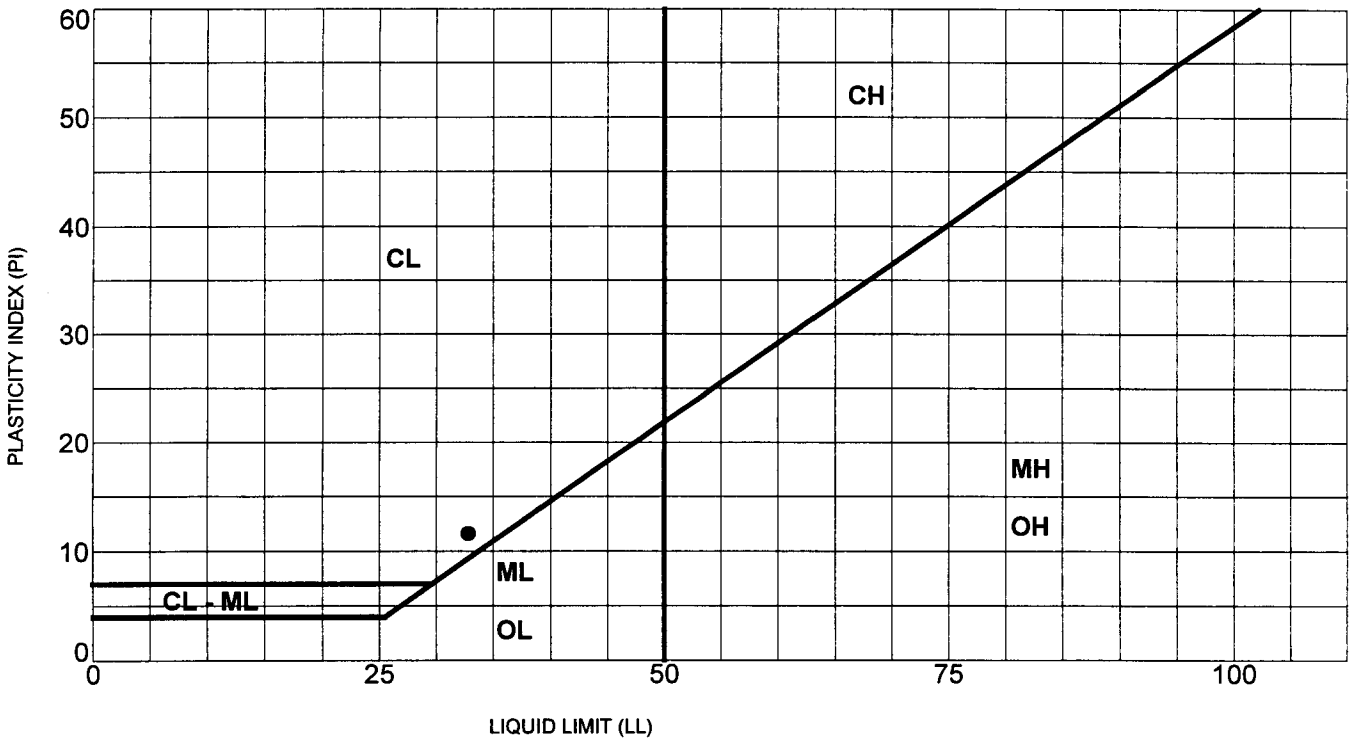
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-106



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-417	4.6	33	21	12	Lean CLAY with sand (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

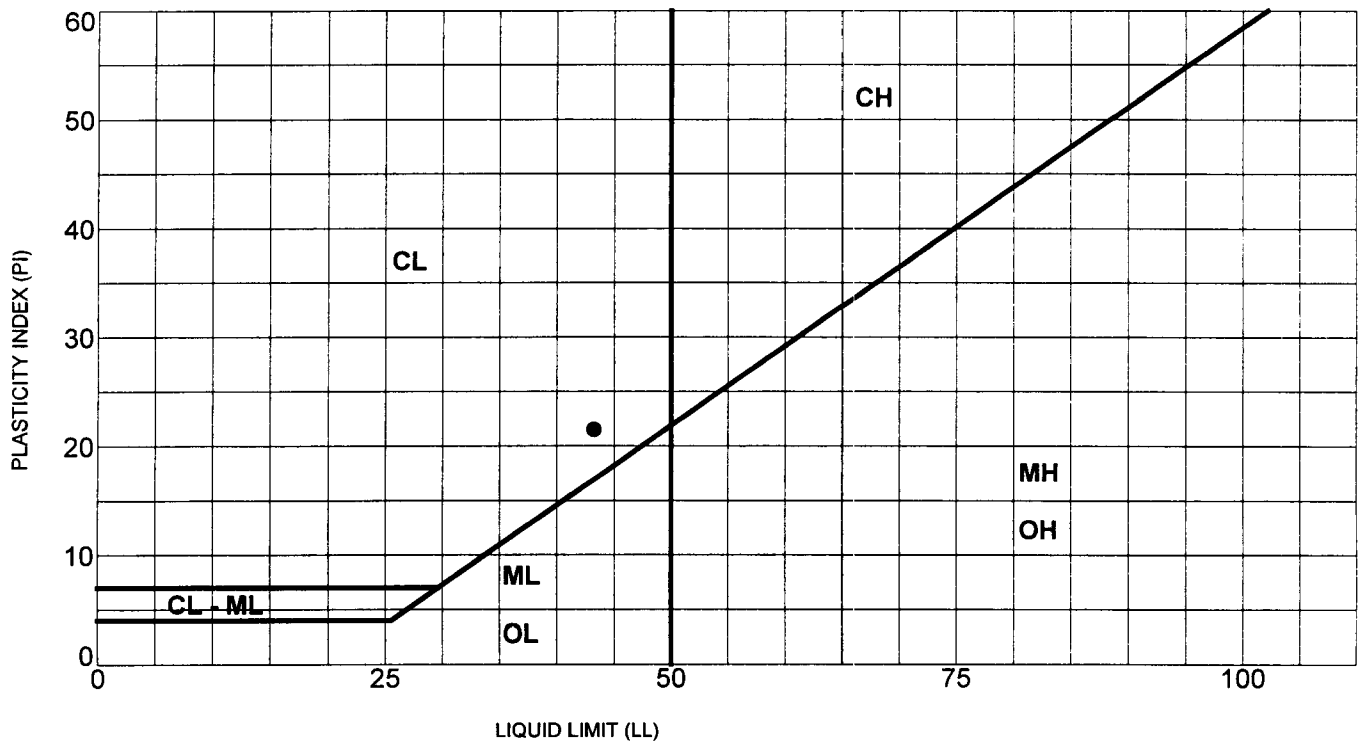
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-107



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-418	1.5	43	22	21	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit

PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

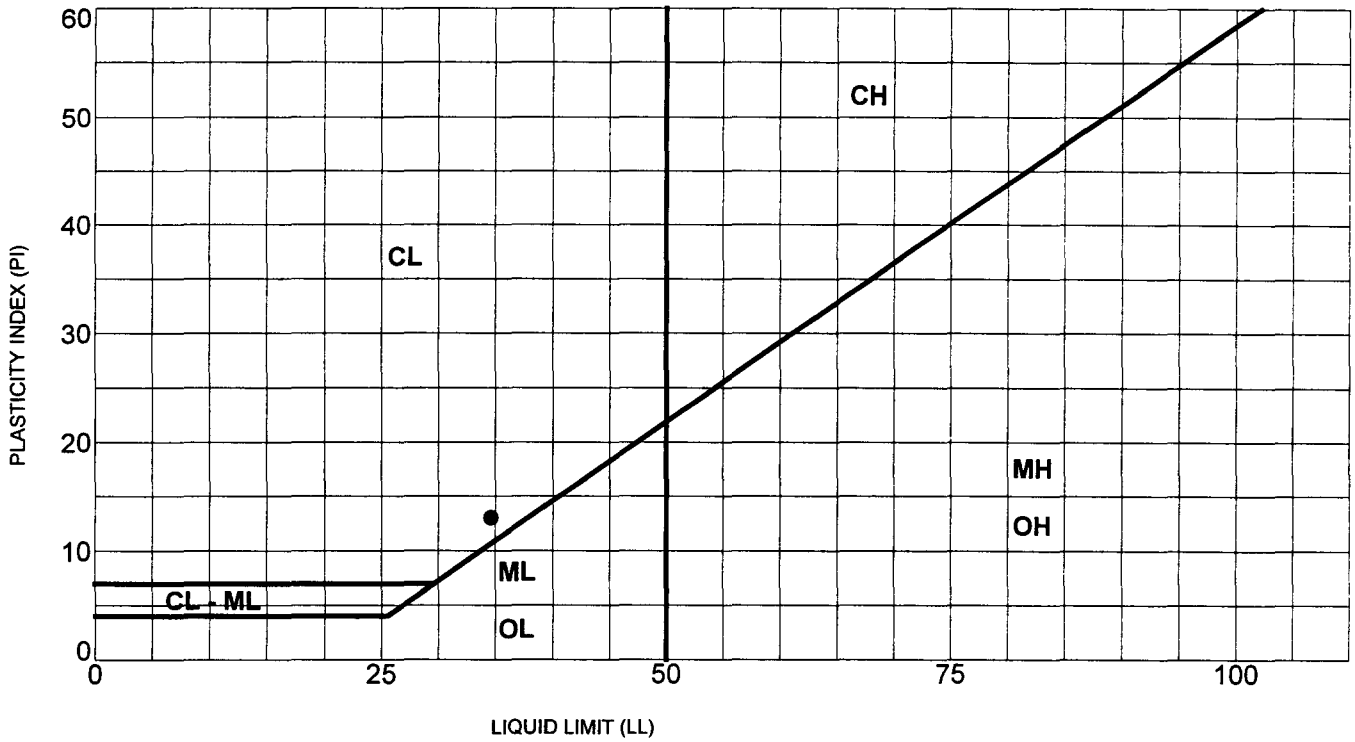
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-108



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-419	6.7	35	22	13	()

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

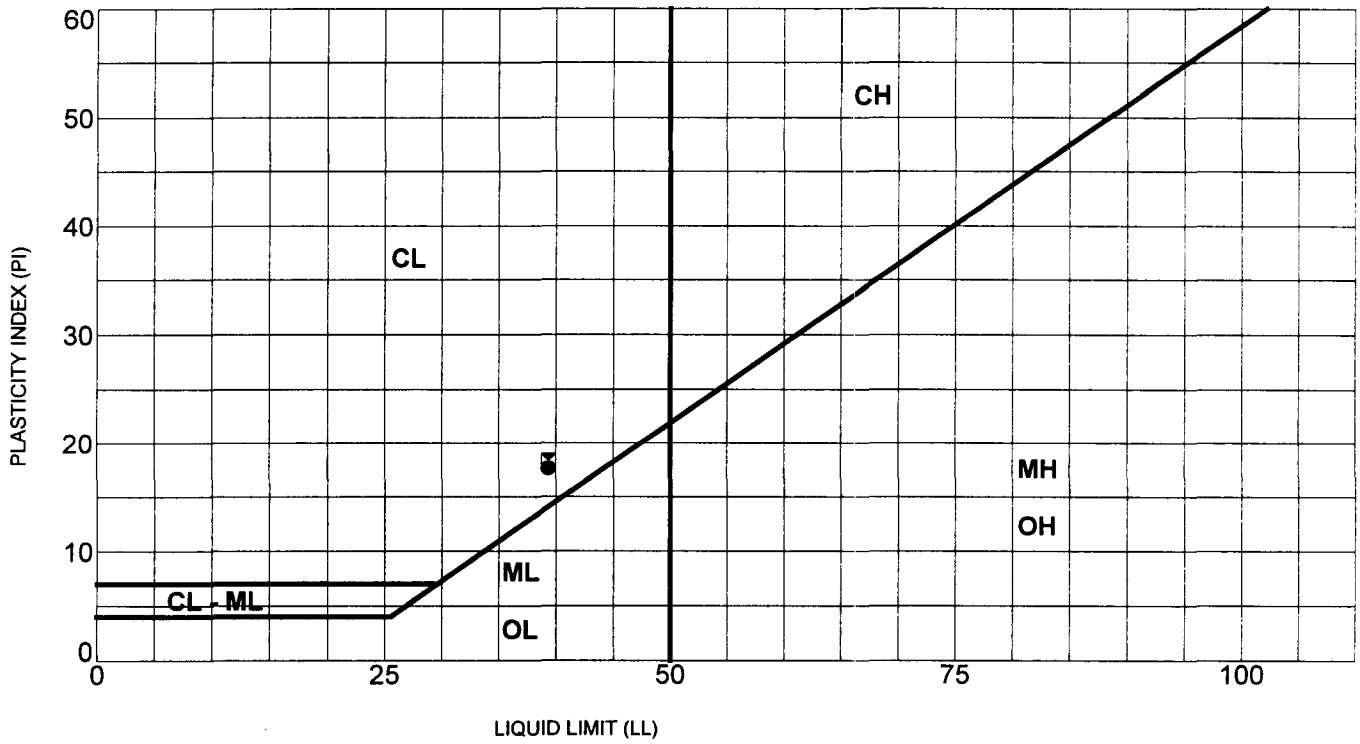
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-109



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-420	4.6	39	22	18	Lean CLAY (CL)
⧗	RB-420	8.2	39	21	18	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

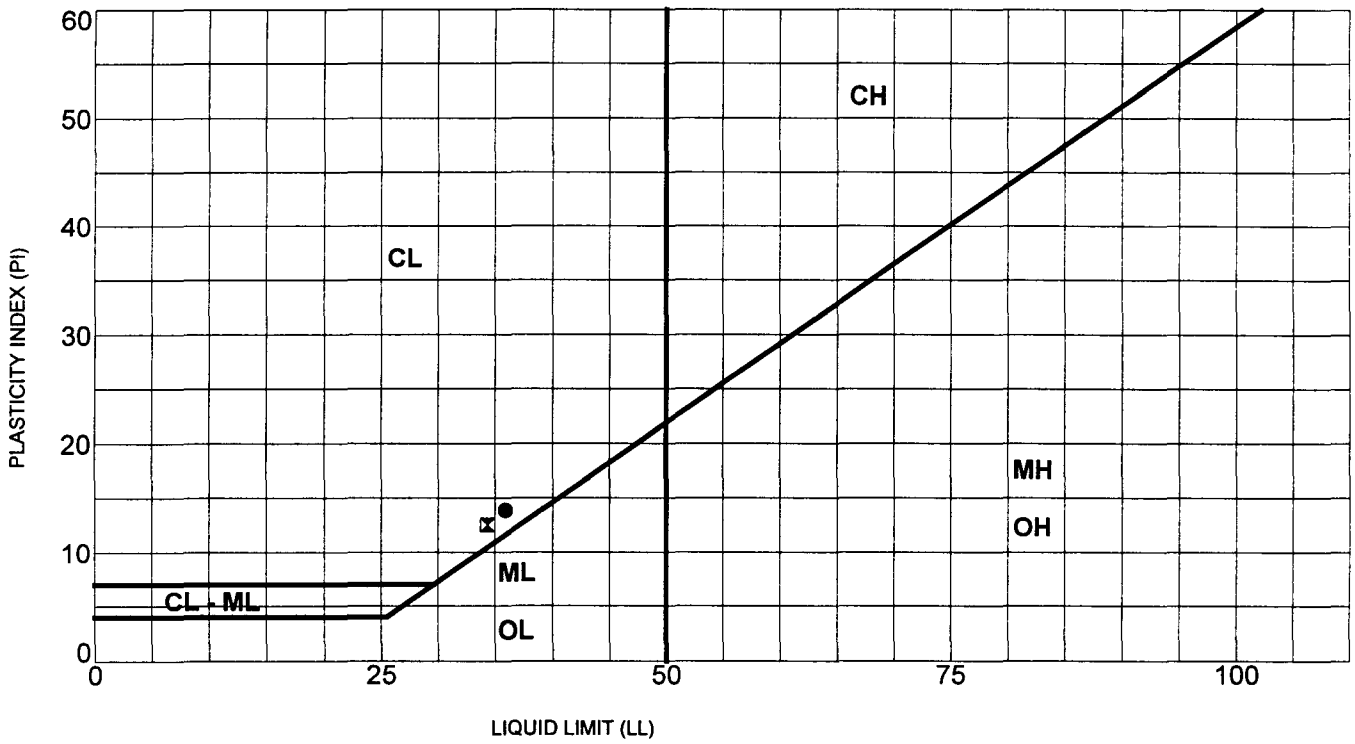
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-110



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-421	1.5	36	22	14	Lean CLAY (CL)
⊠	RB-421	3.7	34	22	13	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

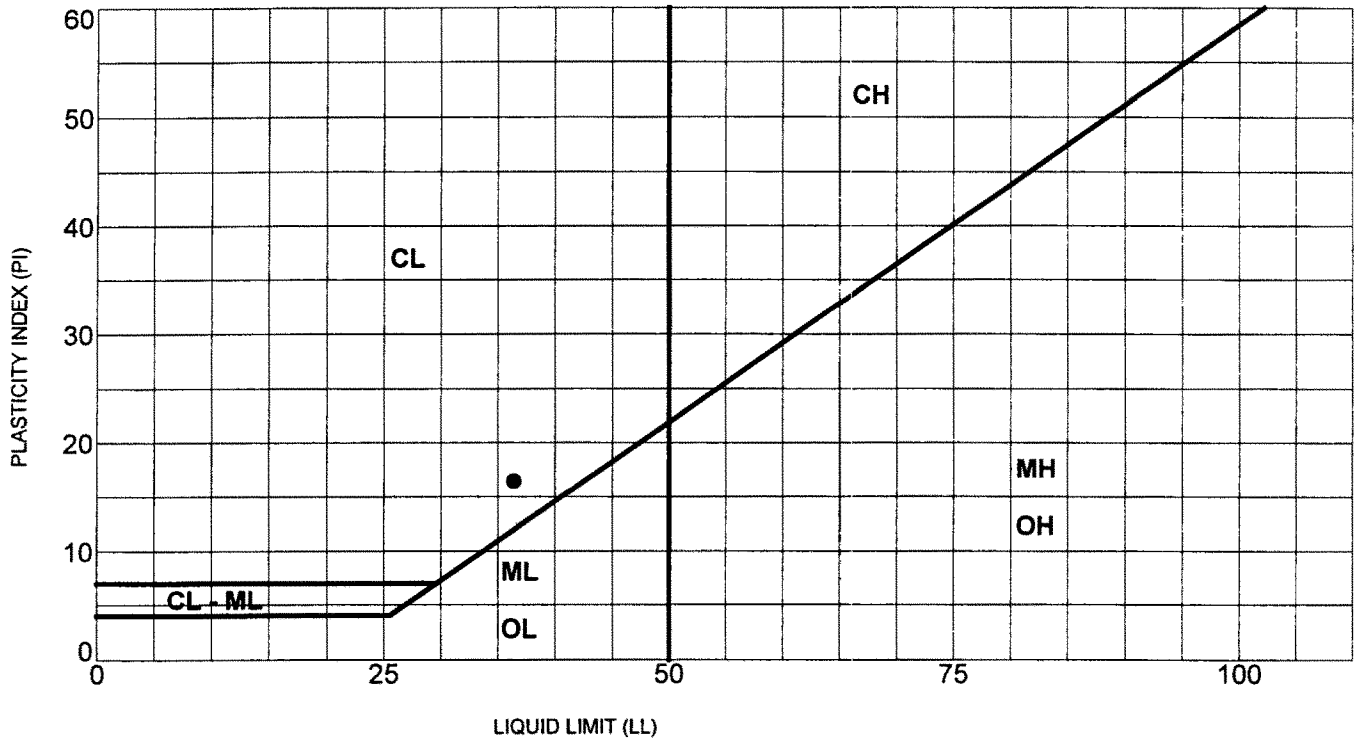
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

PLASTICITY CHART

PLATE

K-111



	Sample	Depth (m)	LL	PL	PI	Description
●	RB-422	6.1	36	20	16	Lean CLAY (CL)

LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

Unified Soil Classification
Fine Grained Soil Groups

	LL < 50
ML	Inorganic clayey silts to very fine sands of low plasticity
CL	Inorganic clays of low to medium plasticity
OL	Organic silts and organic silty clays of low plasticity

	LL ≥ 50
MH	Inorganic silts and clayey silts of high plasticity
CH	Inorganic clays of high plasticity
OH	Organic clays of medium to high plasticity and organic silts

KLEINFELDER

PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

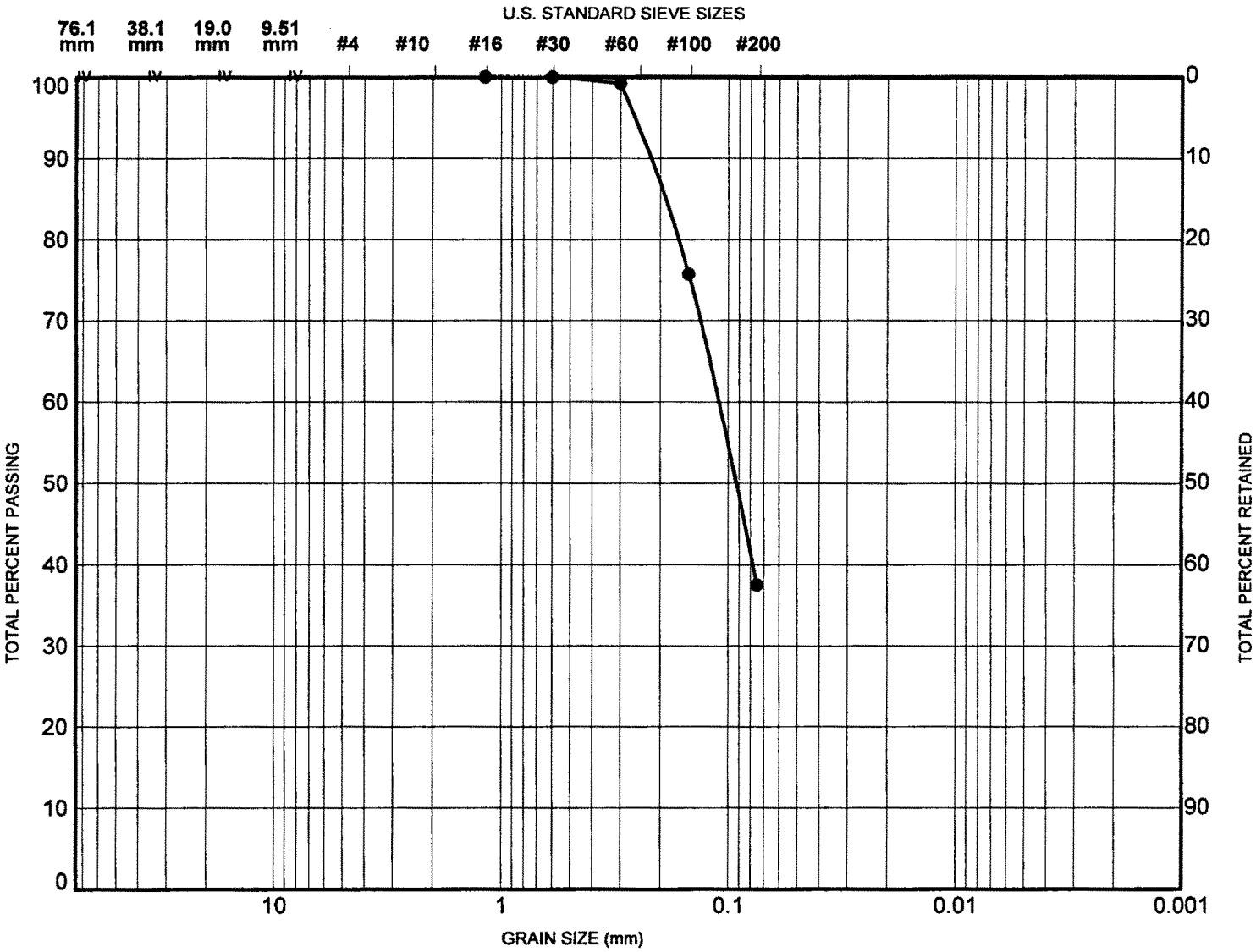
PLASTICITY CHART

PLATE

K-112

GRAIN SIZE DISTRIBUTION

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB- 3-248	10.7	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

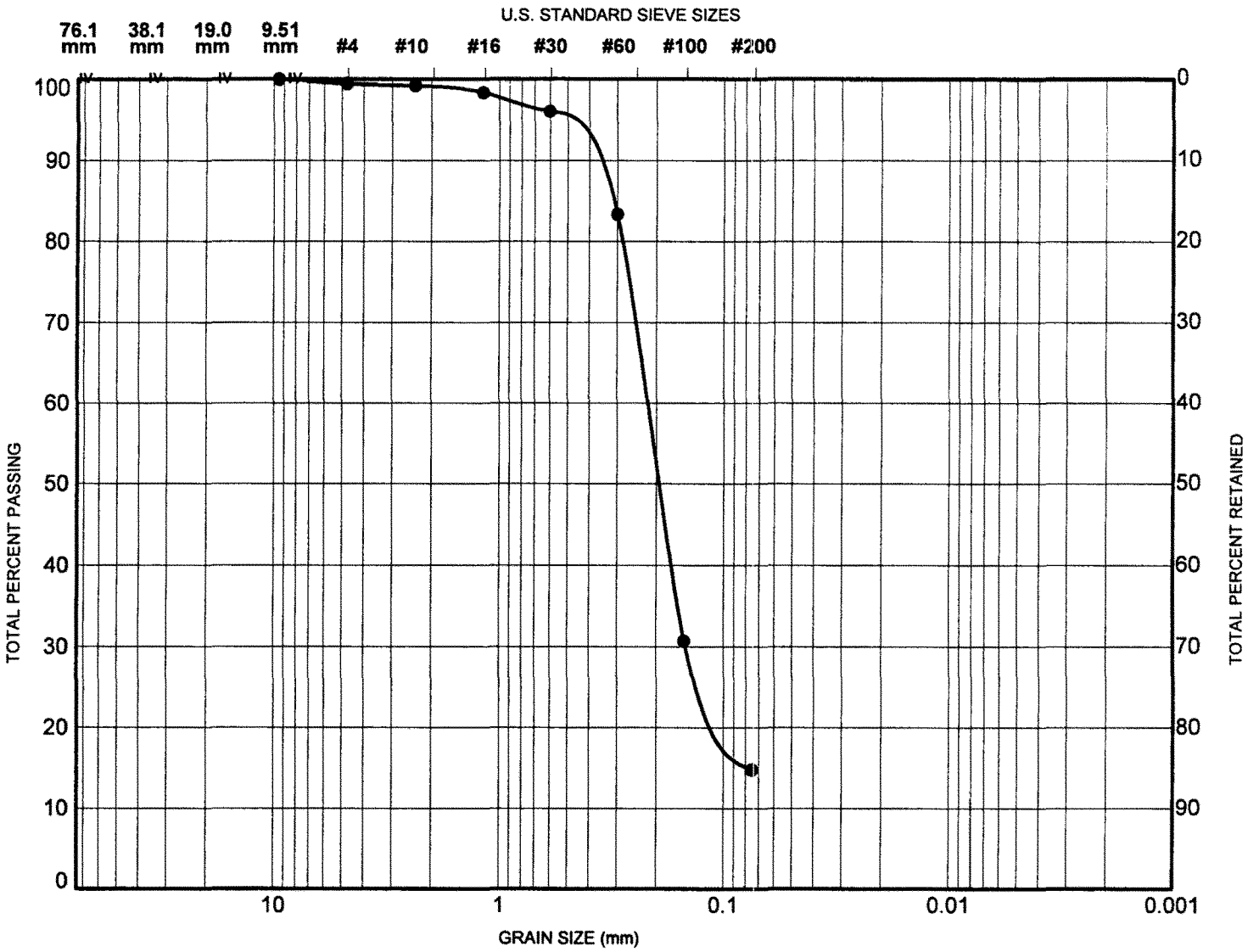
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-113

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB- 5-297	19.8	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

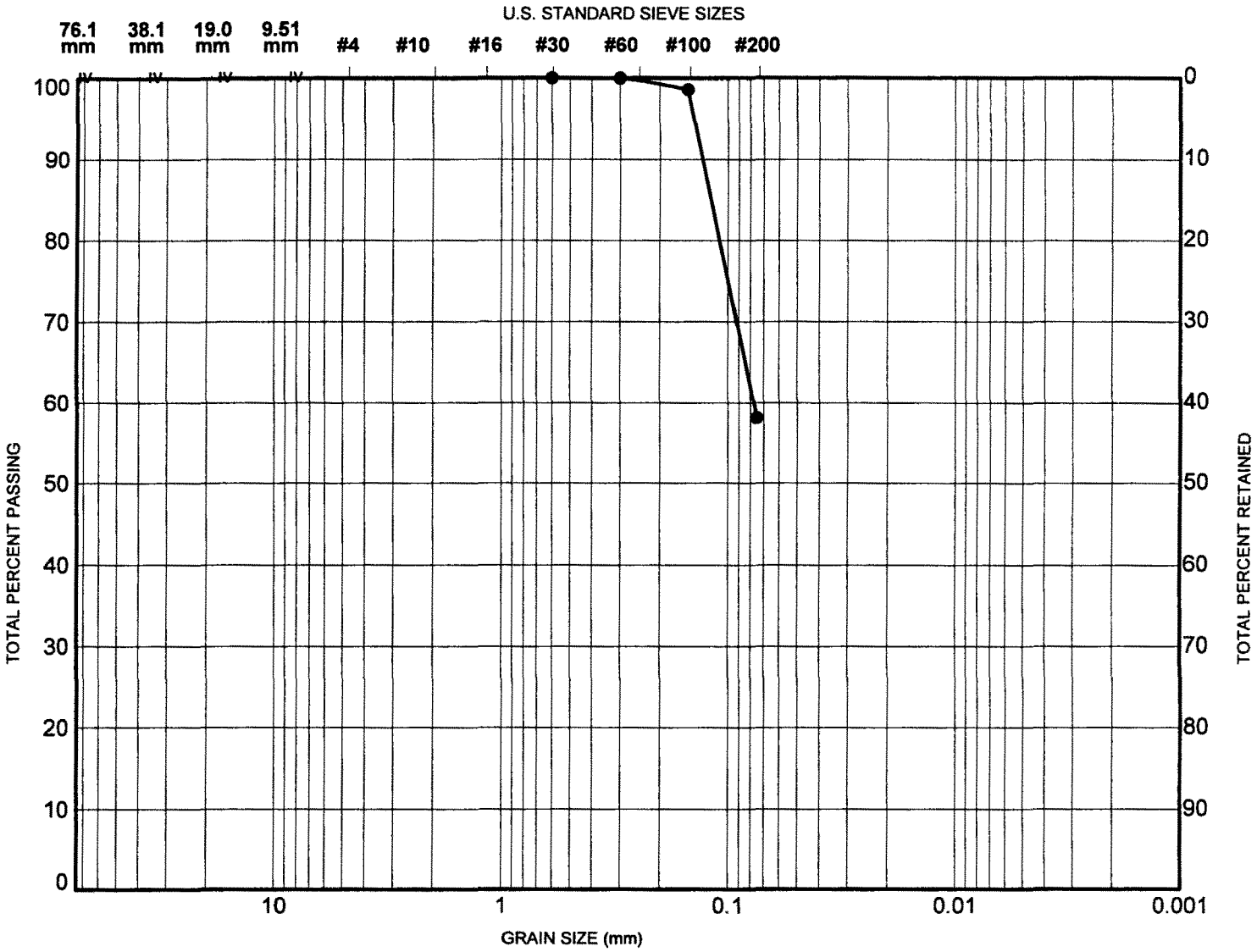
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-114

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB- 5-297	25.9	Sandy SILT	ML

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

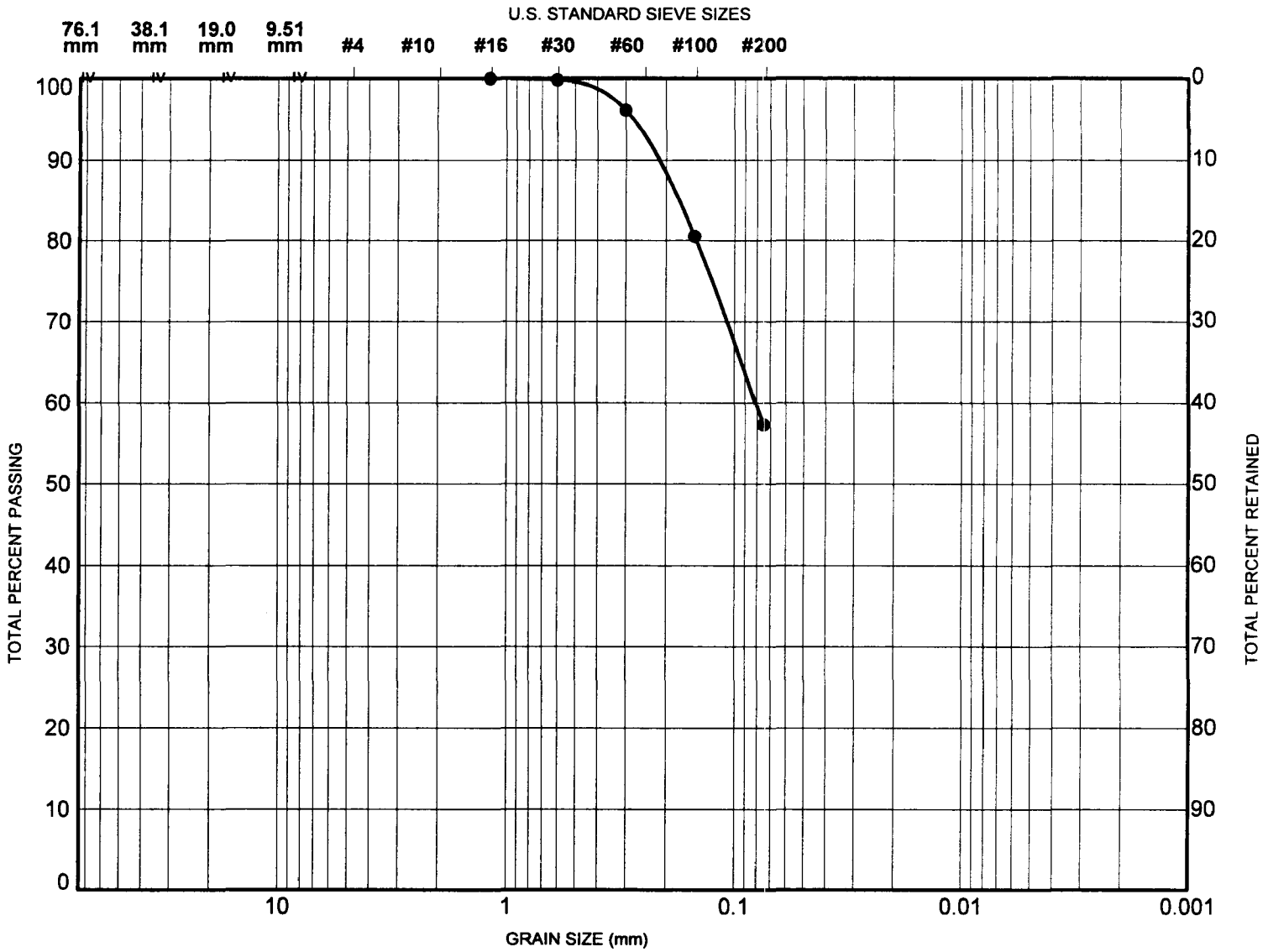
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-115

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB- 8-254	9.1	Sandy Lean CLAY	CL

KLEINFELDER

PROJECT NO. 35-8163-05

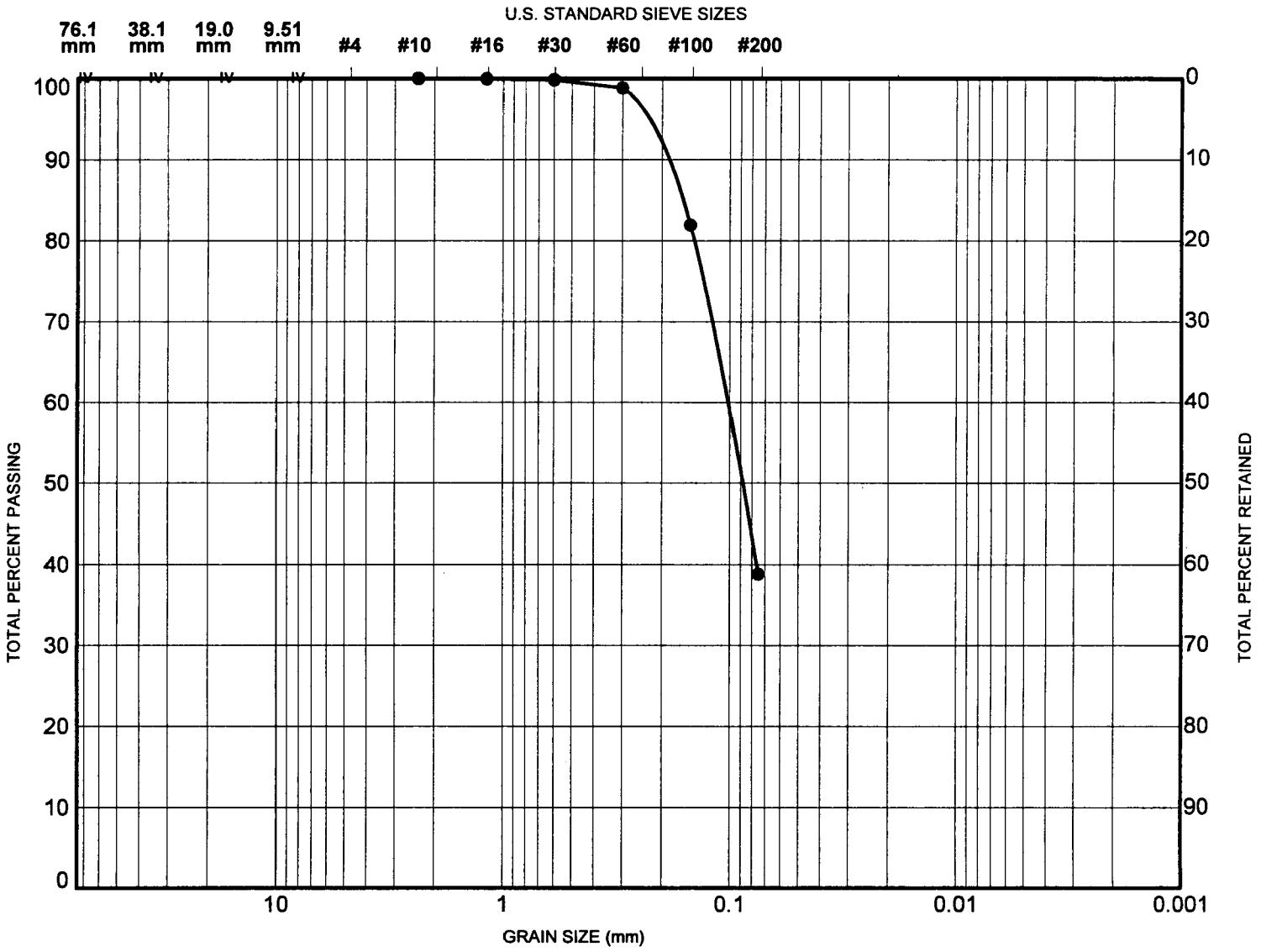
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-116



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB- 9-298	3.0	Clayey SAND	SC

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

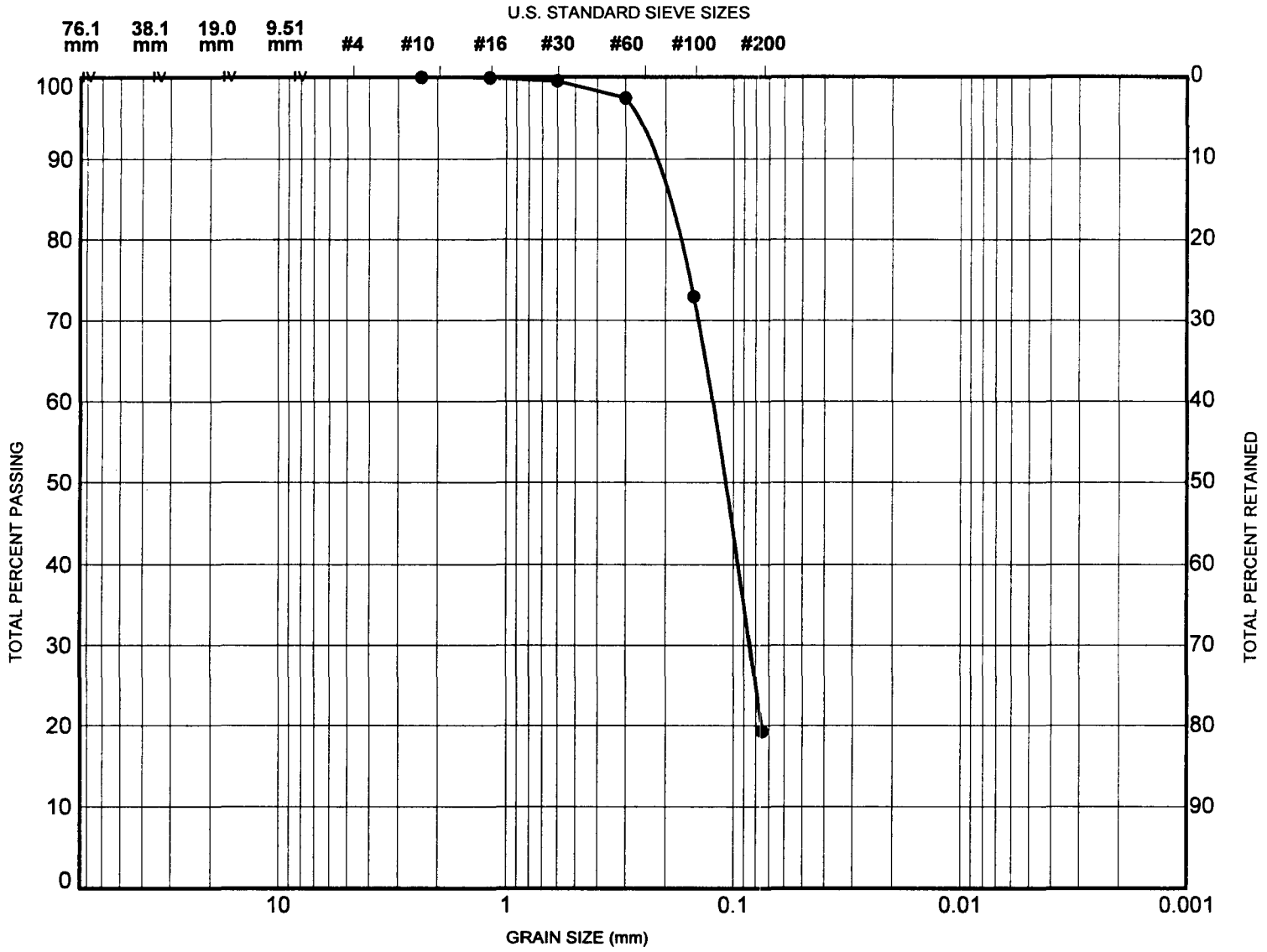
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-117

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-10-303	13.7	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

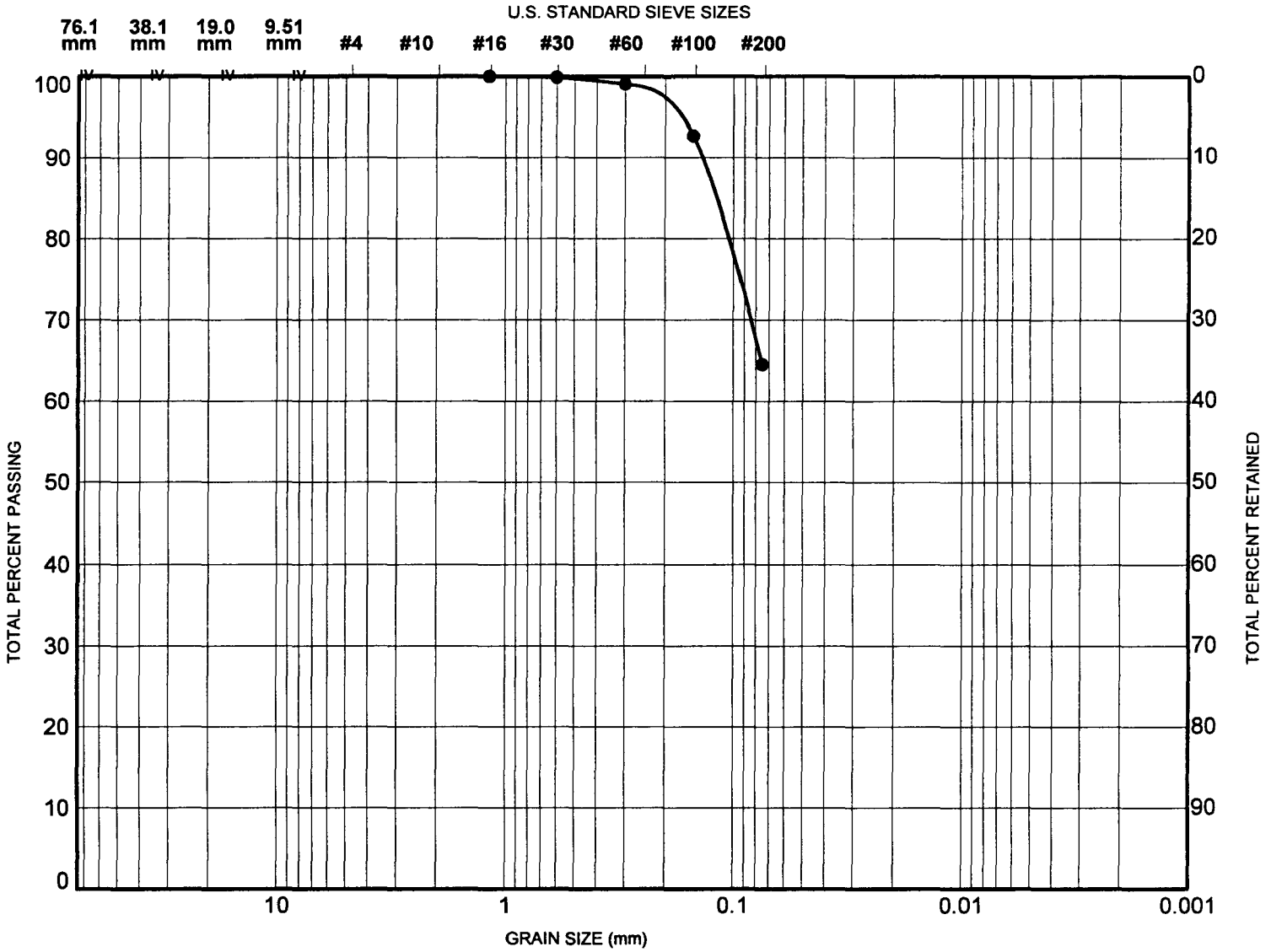
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-118

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-11-262	4.6	Sandy CLAY	CL

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

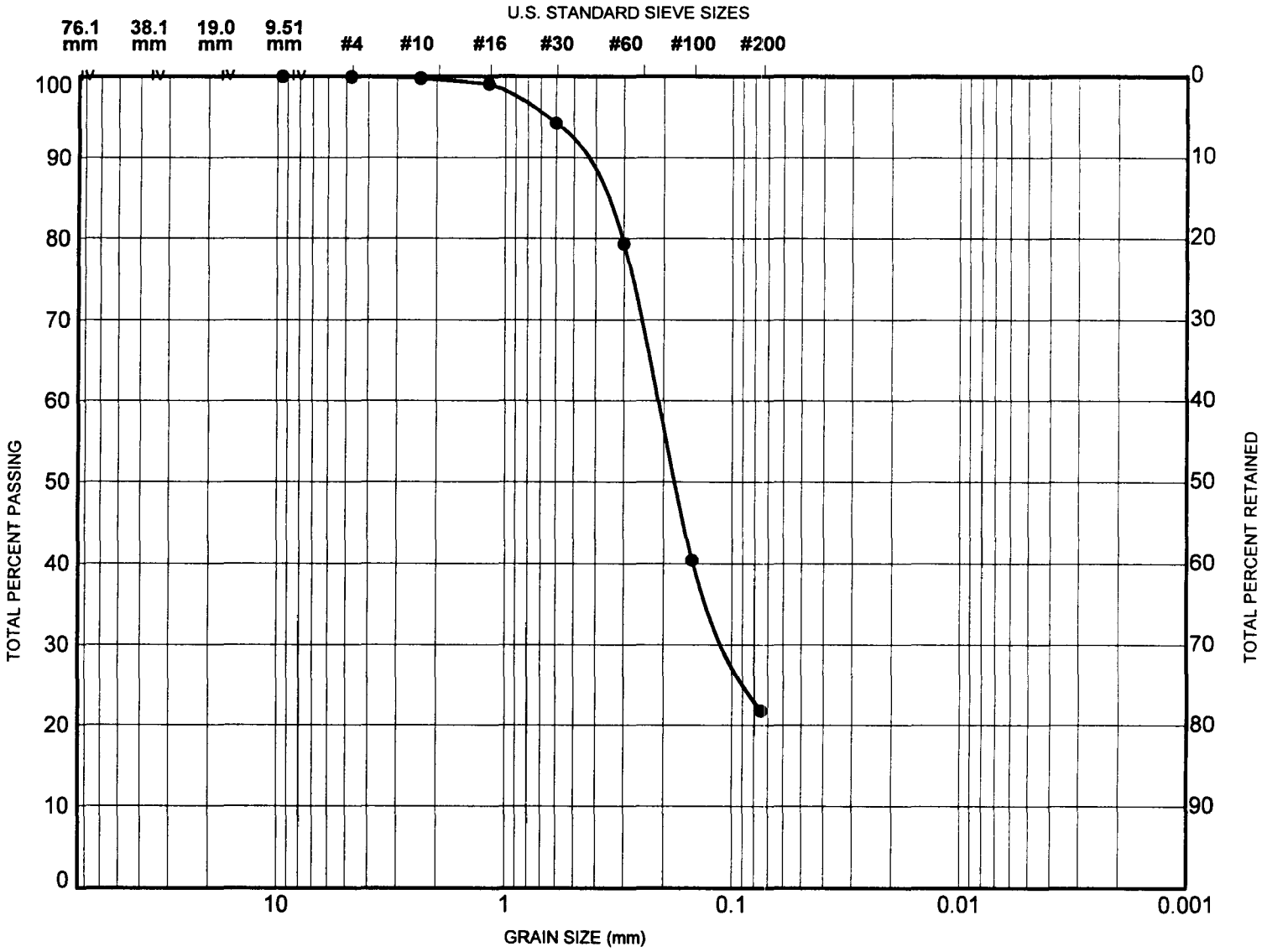
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-119

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-13-308	42.7	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

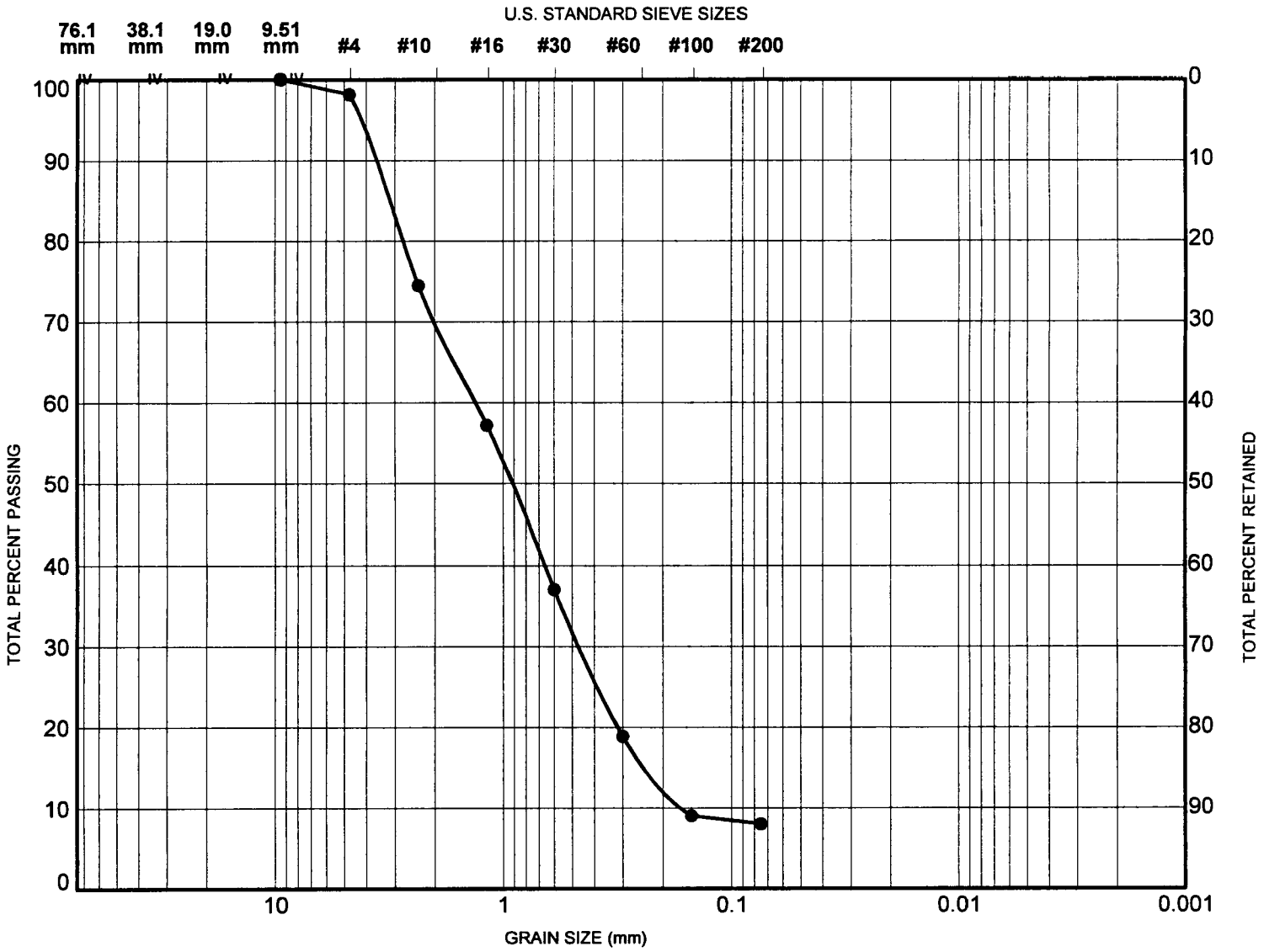
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-120

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-15-266	21.3	Well-Graded SAND with silt	SW-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

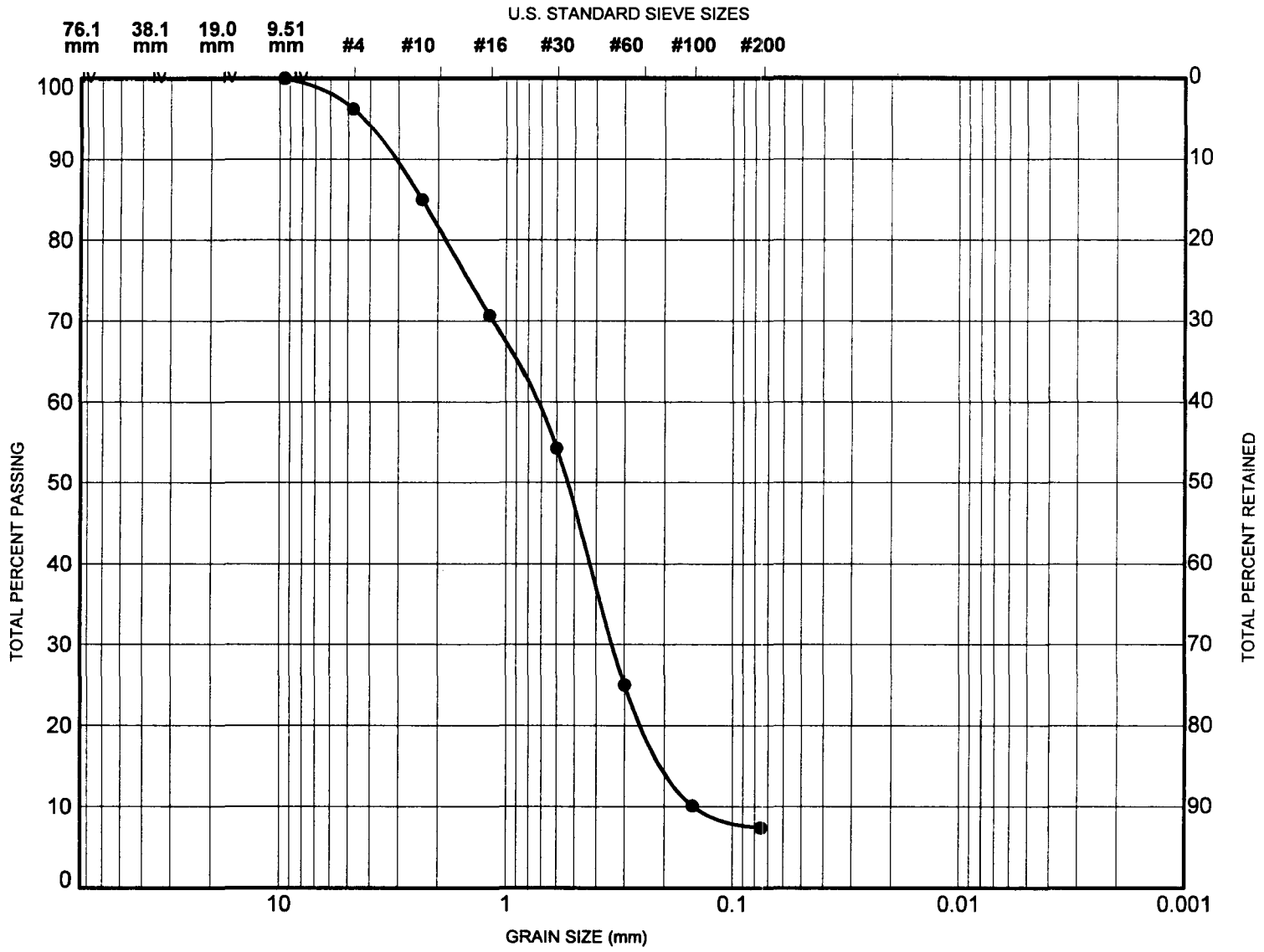
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-121

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-1504-359	21.0	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

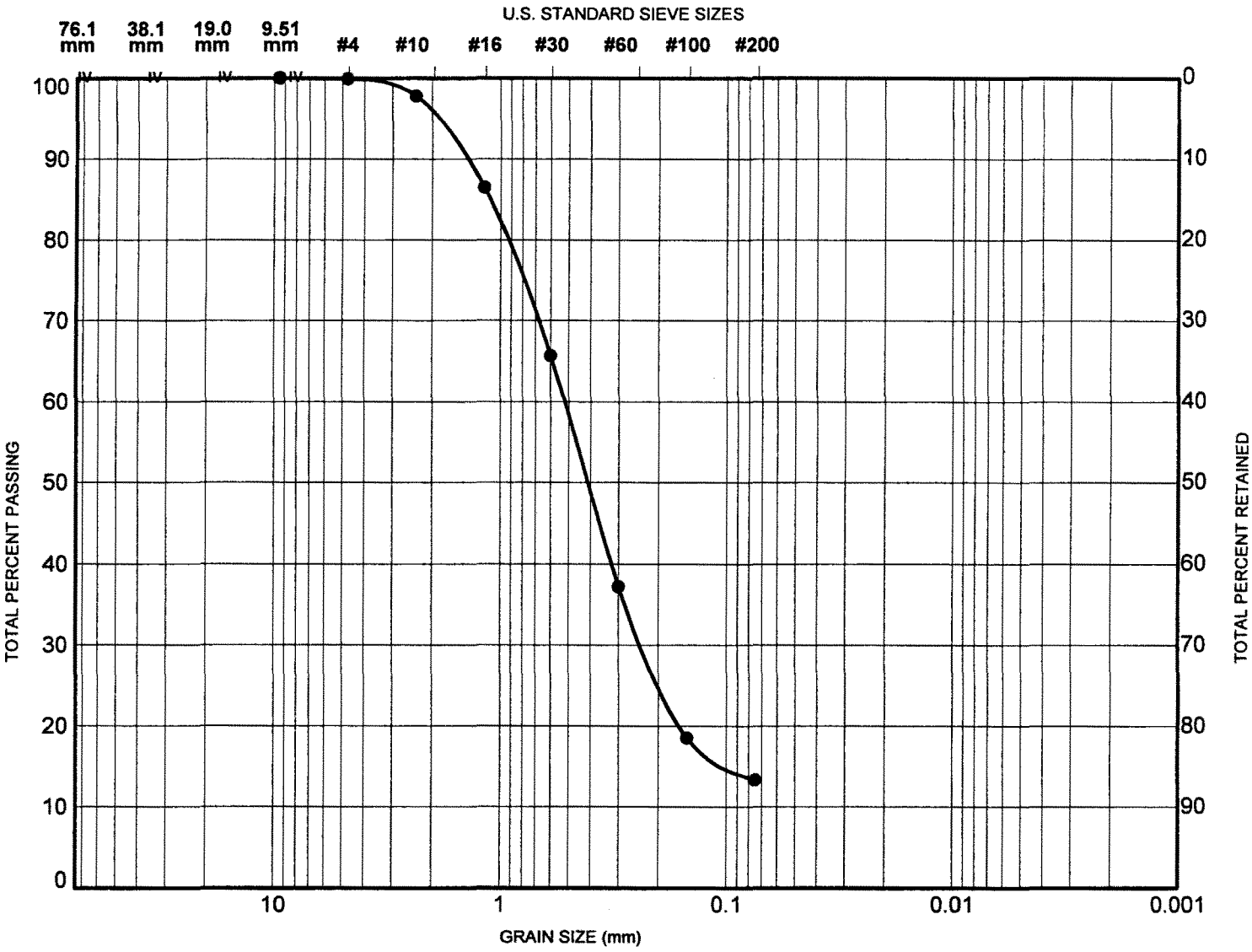
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-122

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-16-268	21.3	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

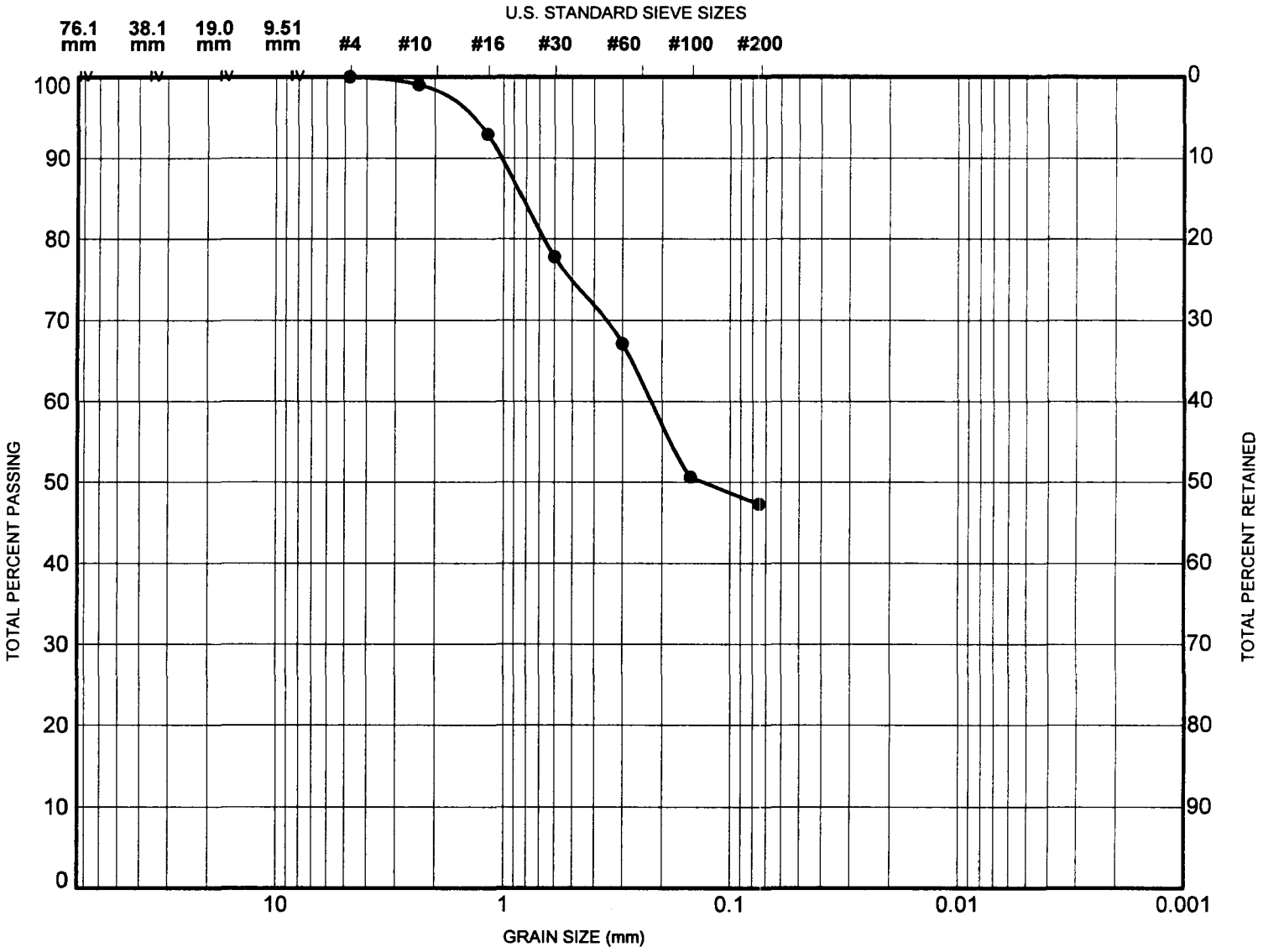
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-123

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-16-362	18.1	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

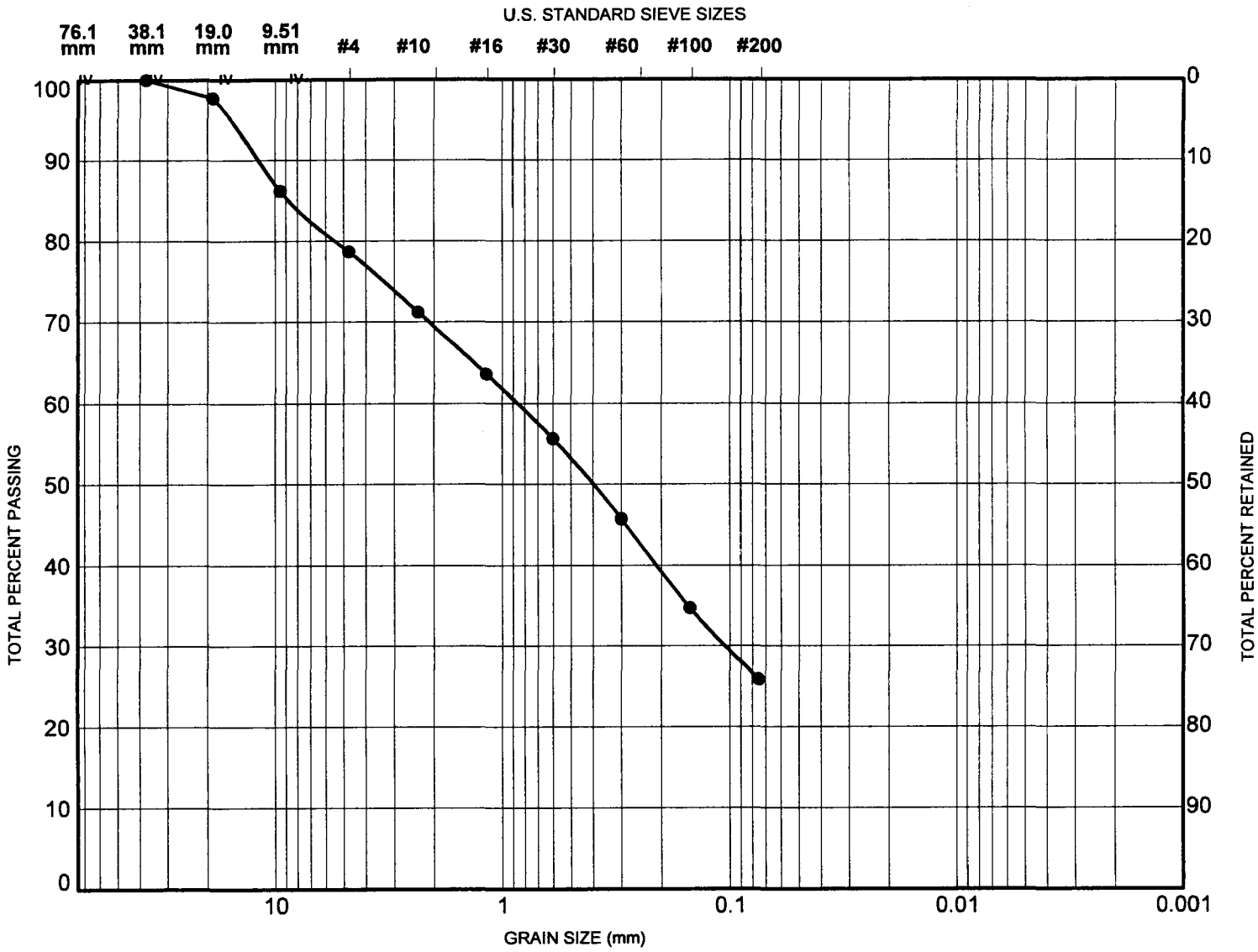
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-124

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-19-279	36.6	Silty SAND with gravel	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

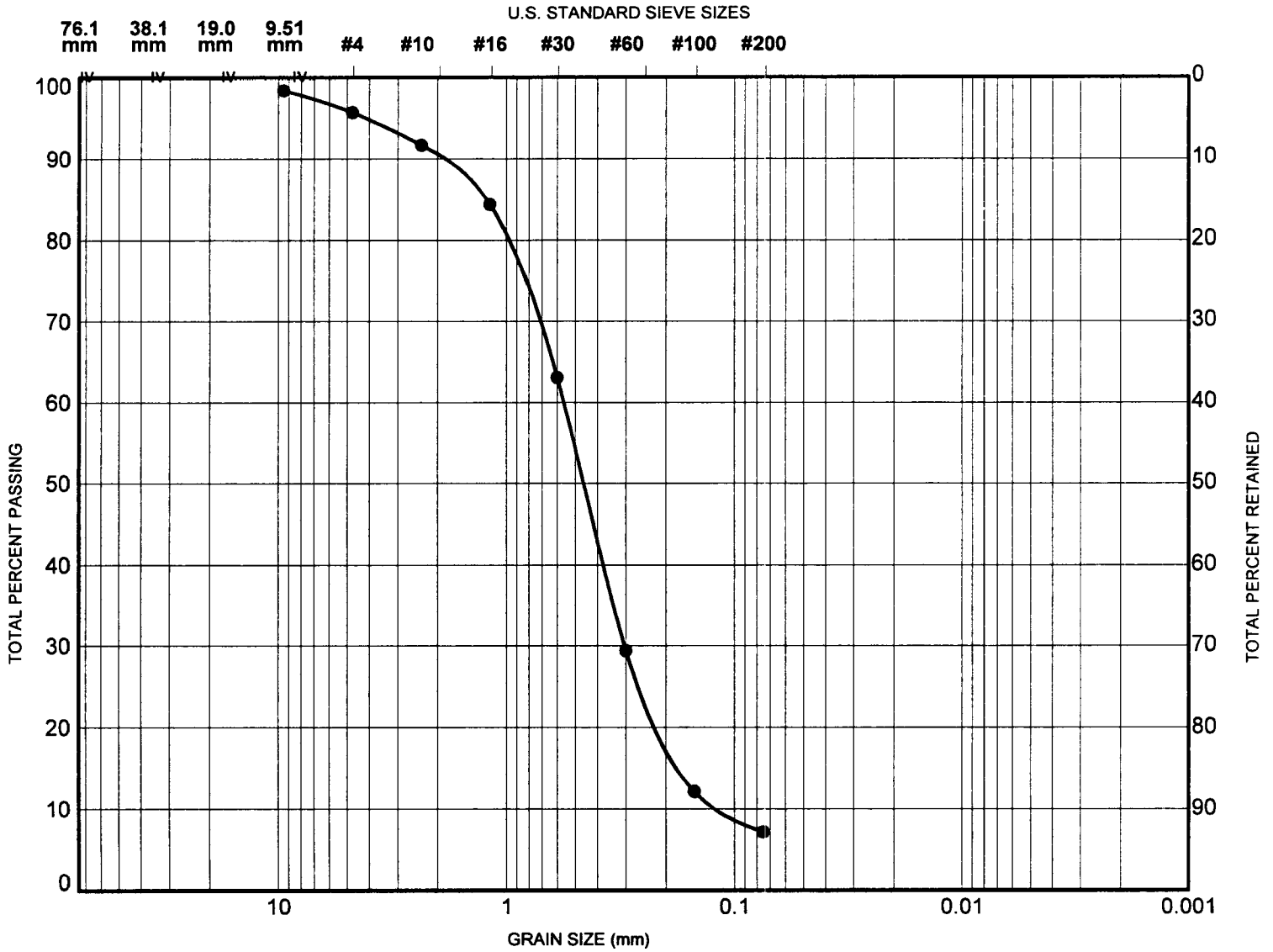
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-125

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-23-289	9.1	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

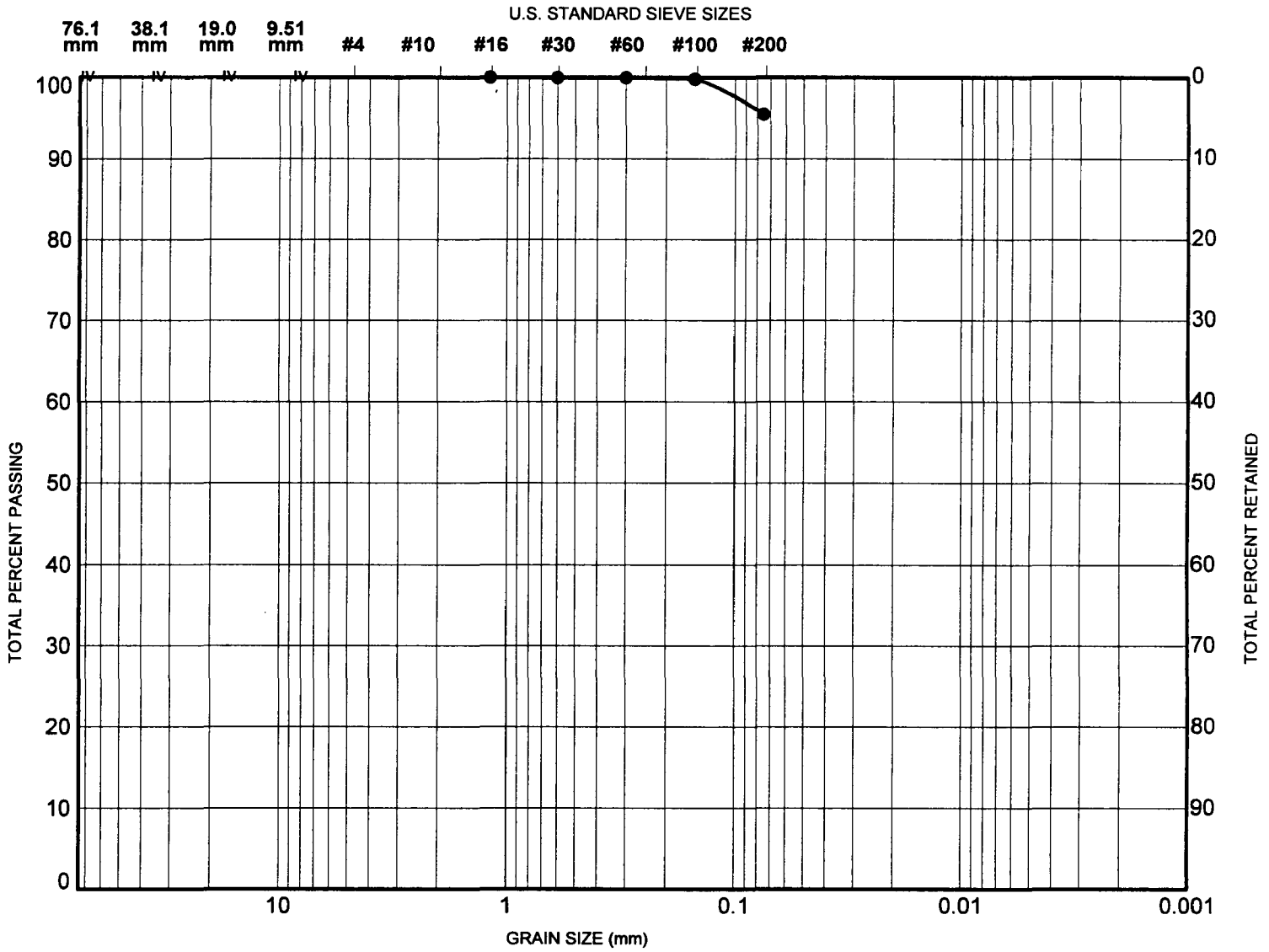
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-126

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-25-336	4.6	SILT	ML

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

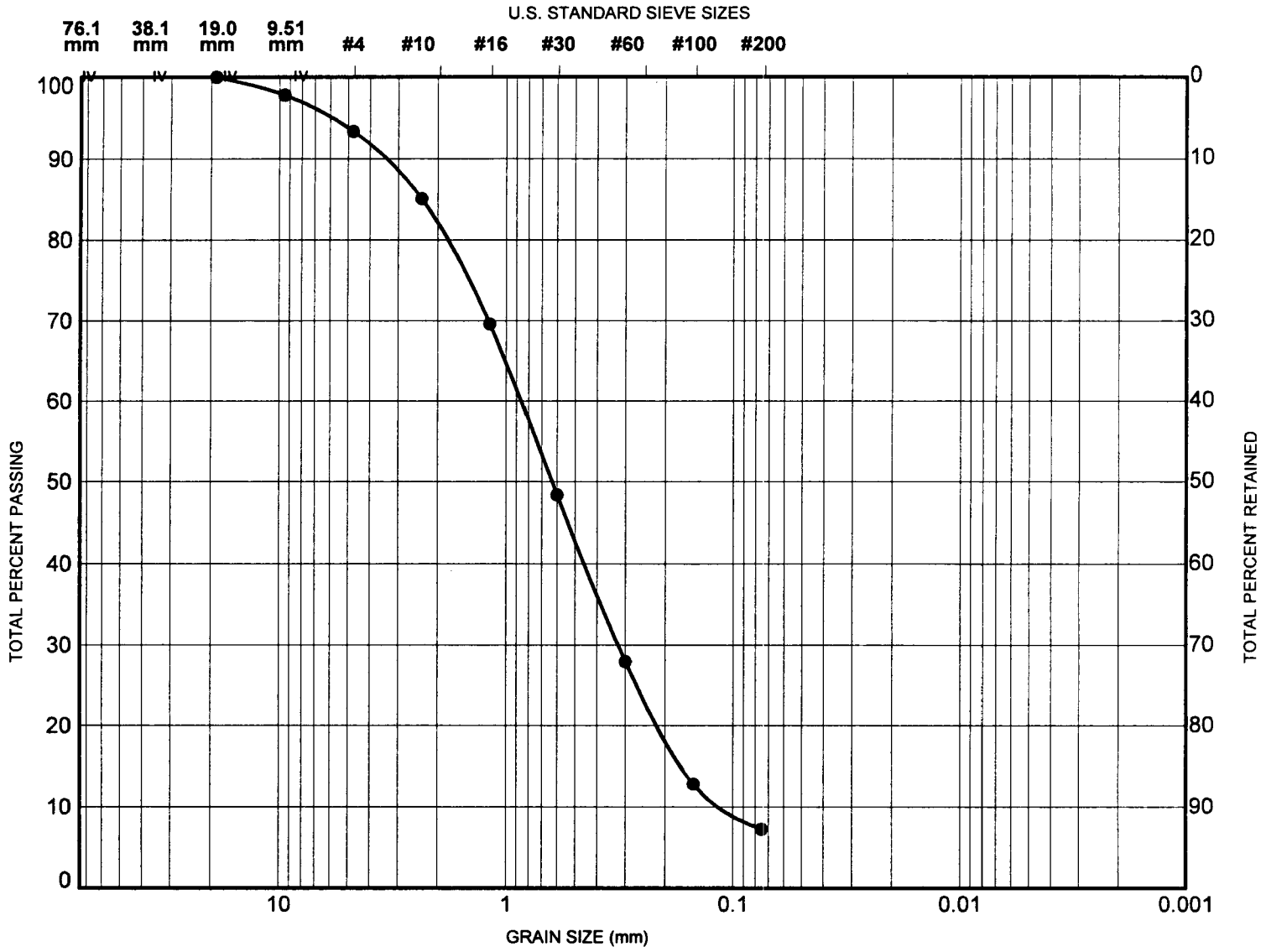
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-127

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-27-340	7.6	Well-Graded SAND with silt	SW-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

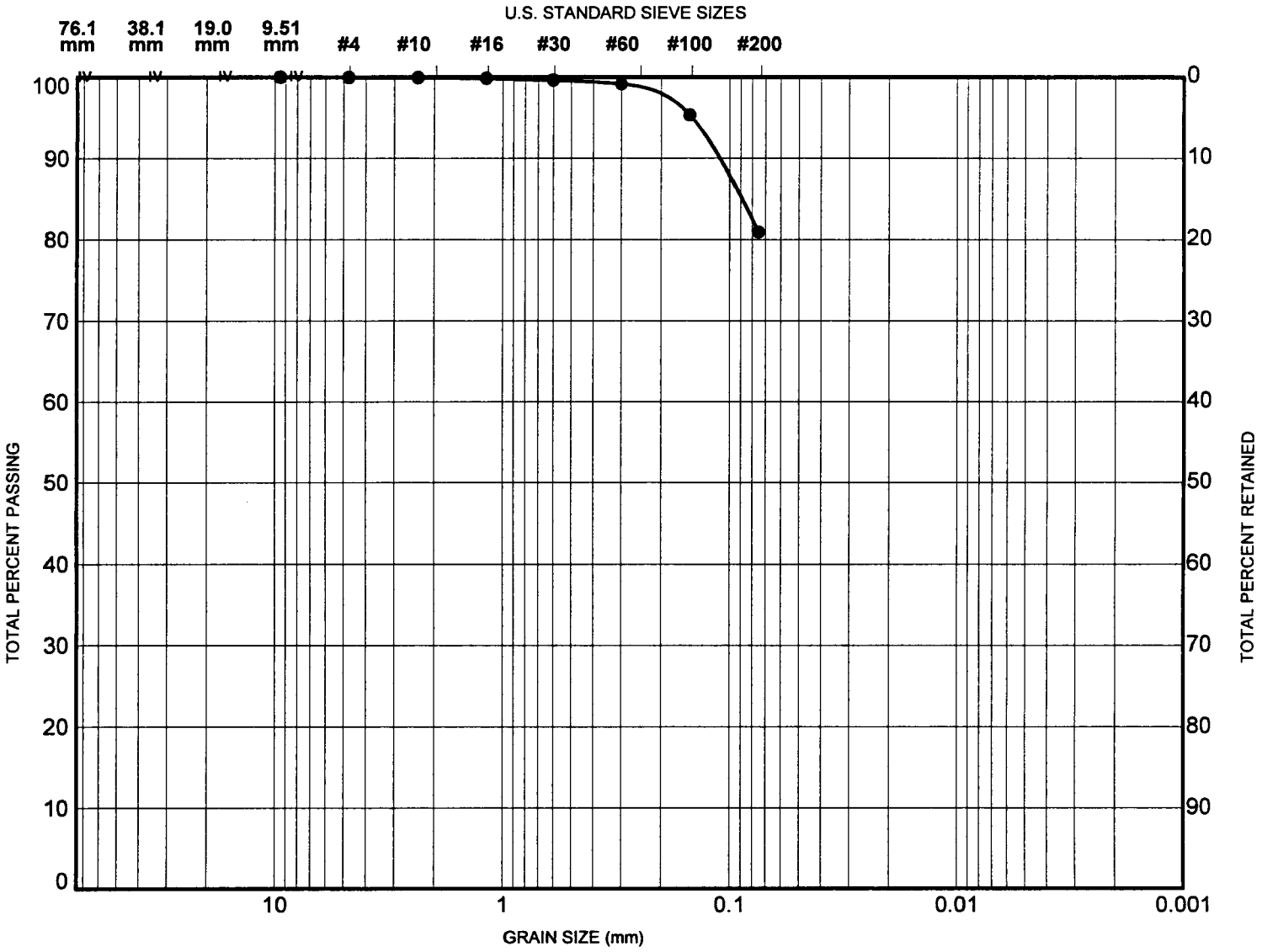
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-128

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-30-351	4.6	SILT with sand	ML

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

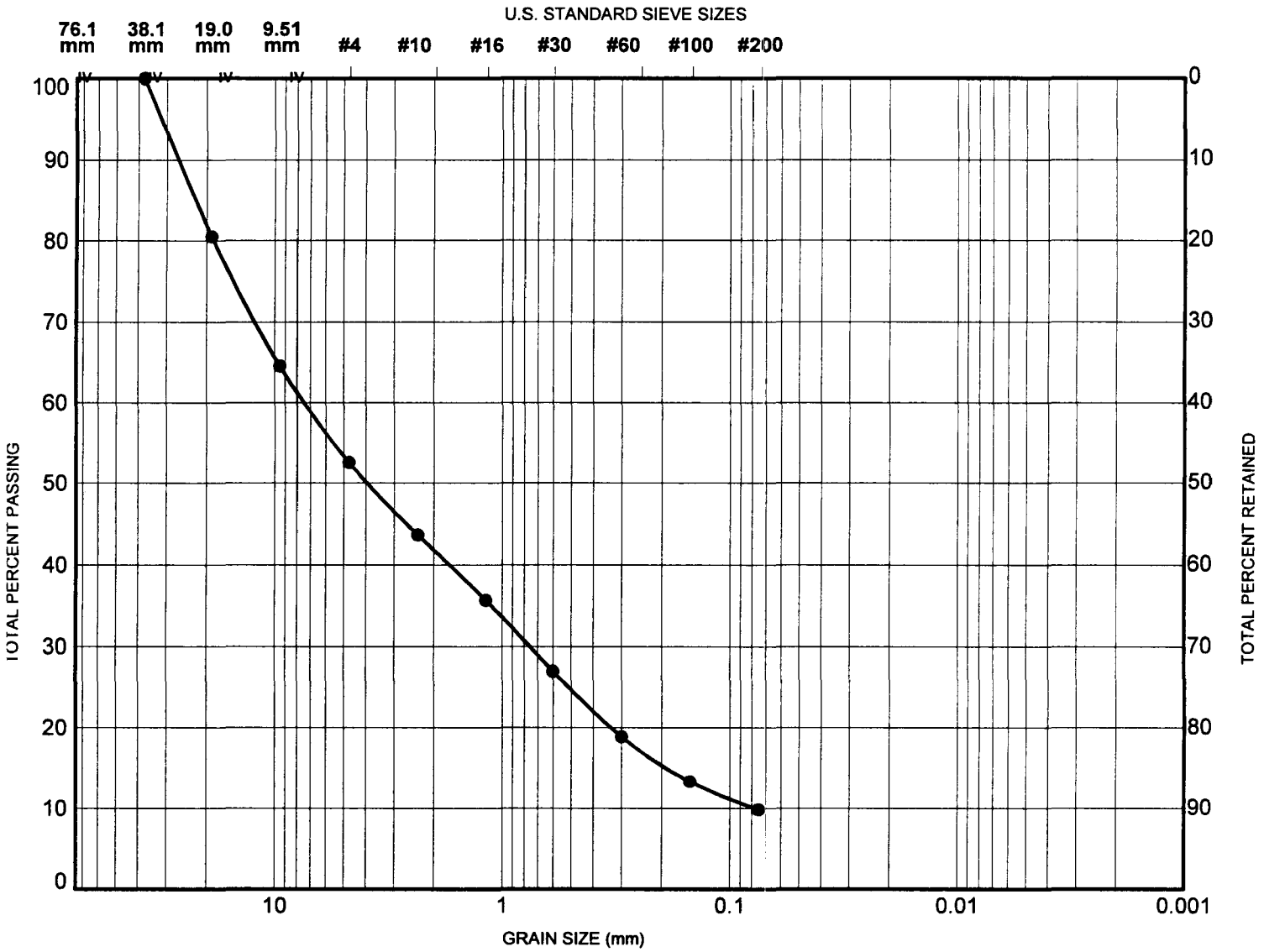
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-129

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-30-351	12.2	Poorly Graded GRAVEL with silt and sand	GP-GM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

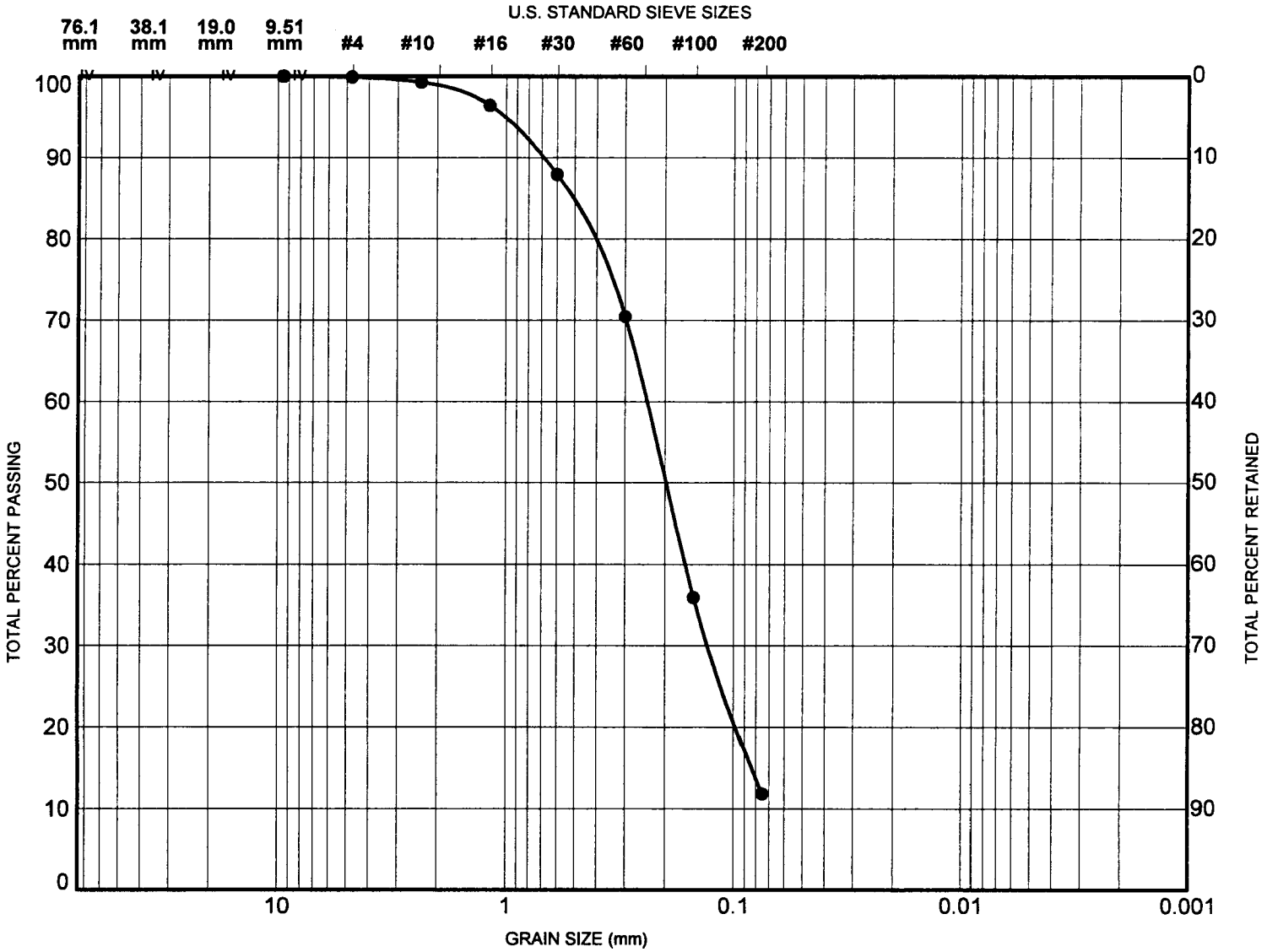
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-130

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-30-352	12.2	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

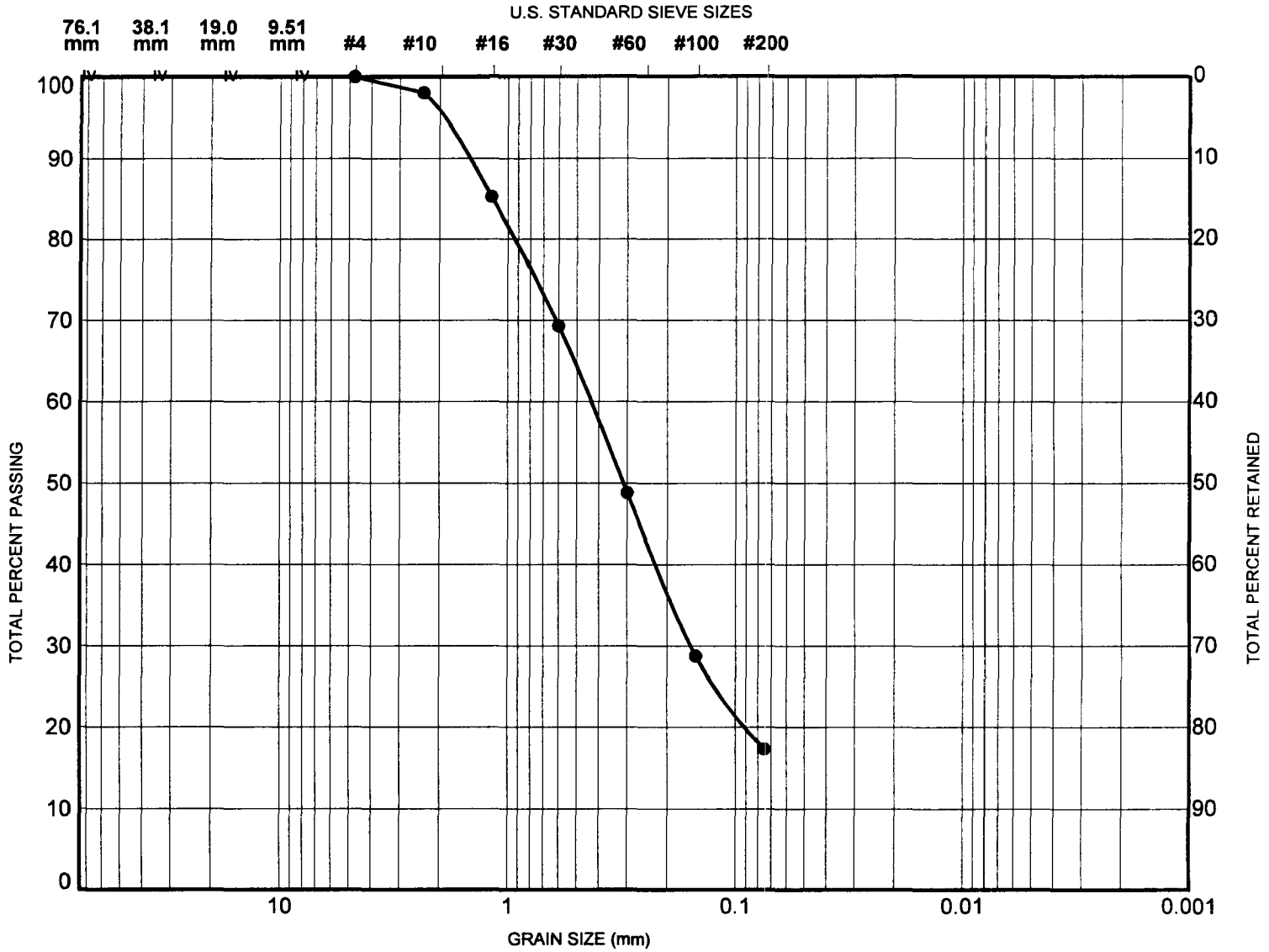
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-131

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-31-353	7.3	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

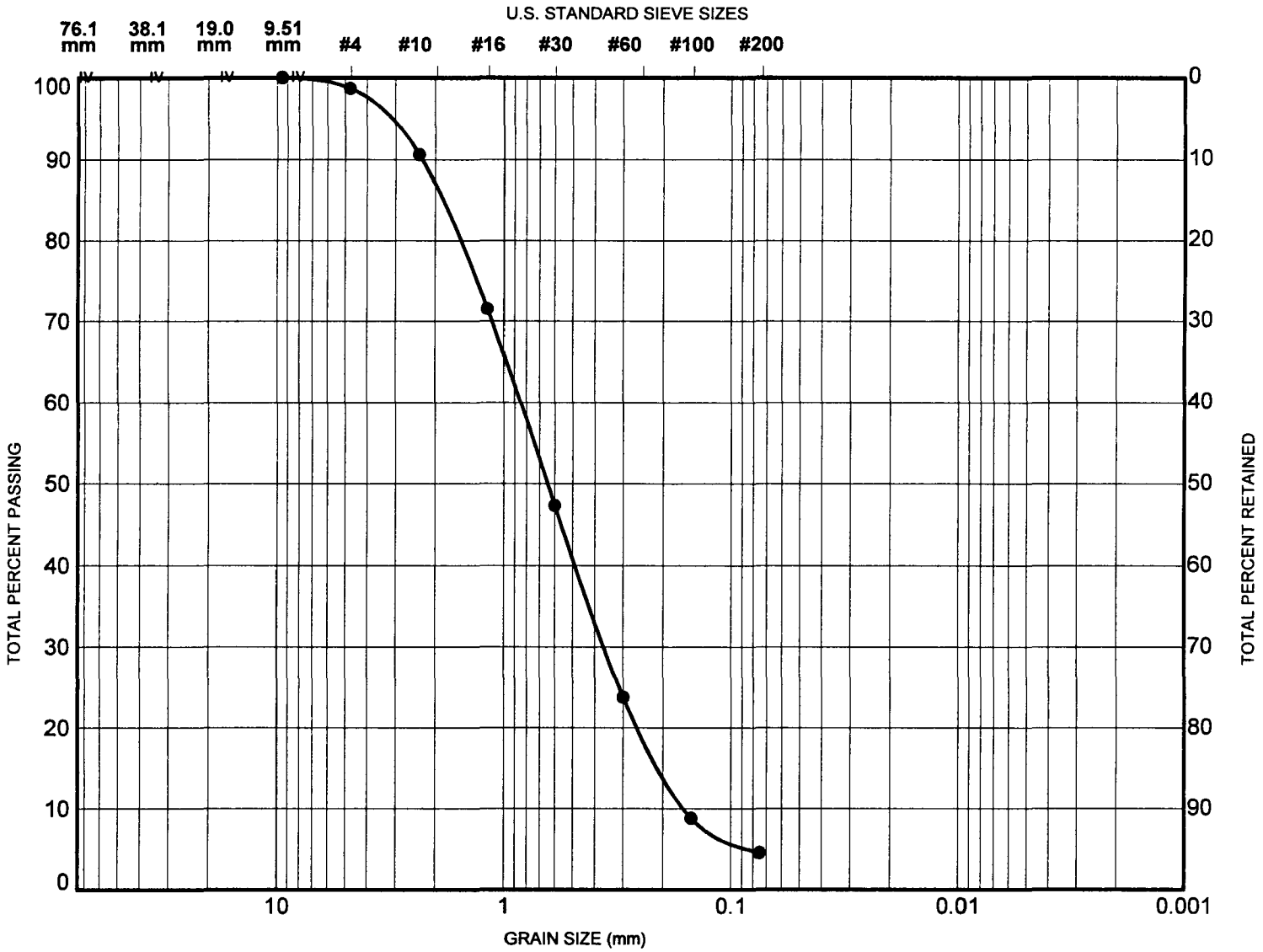
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-132

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-31-353	13.4	Poorly Graded SAND	SP

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

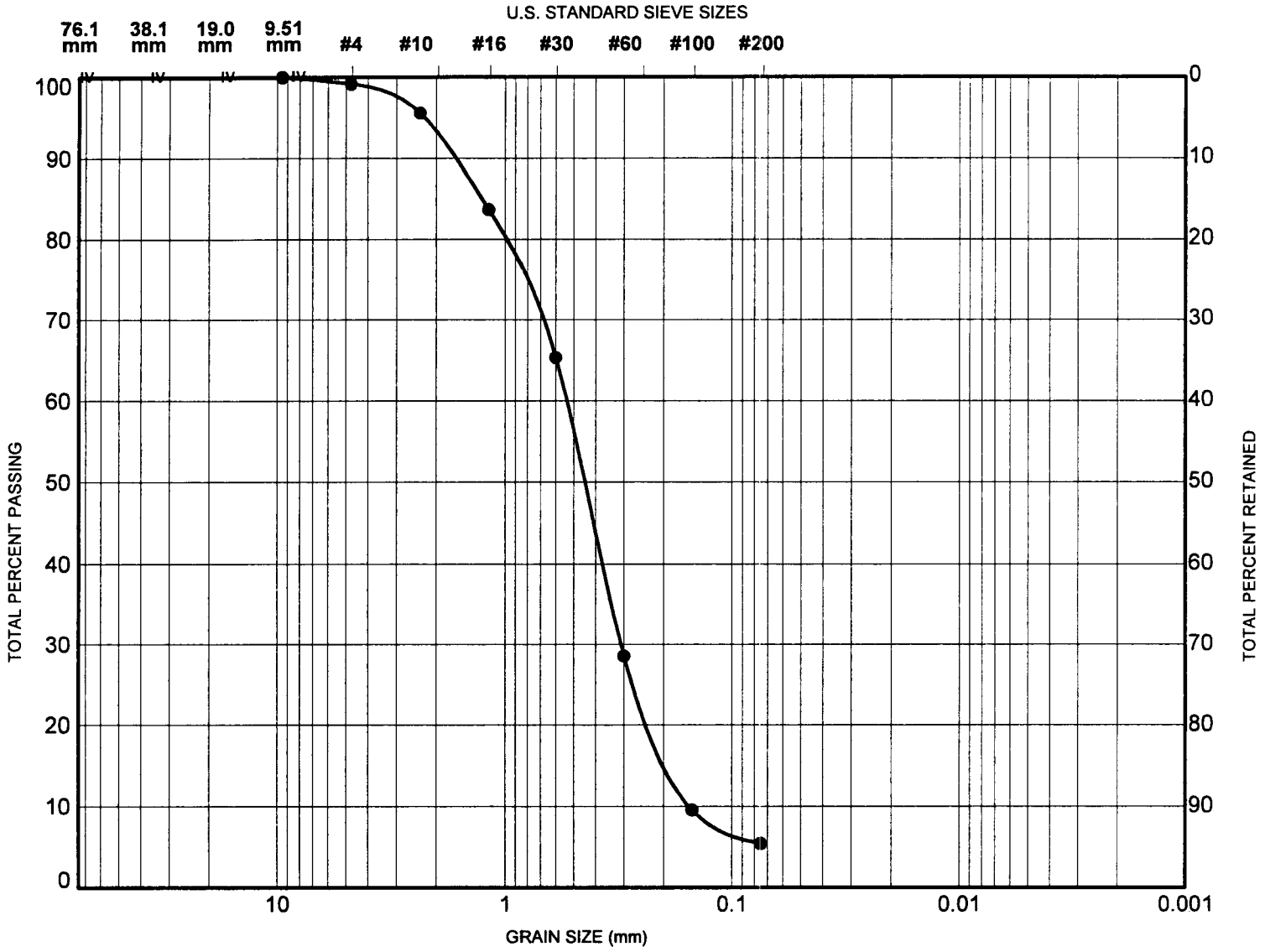
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-133

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-31-354	21.0	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

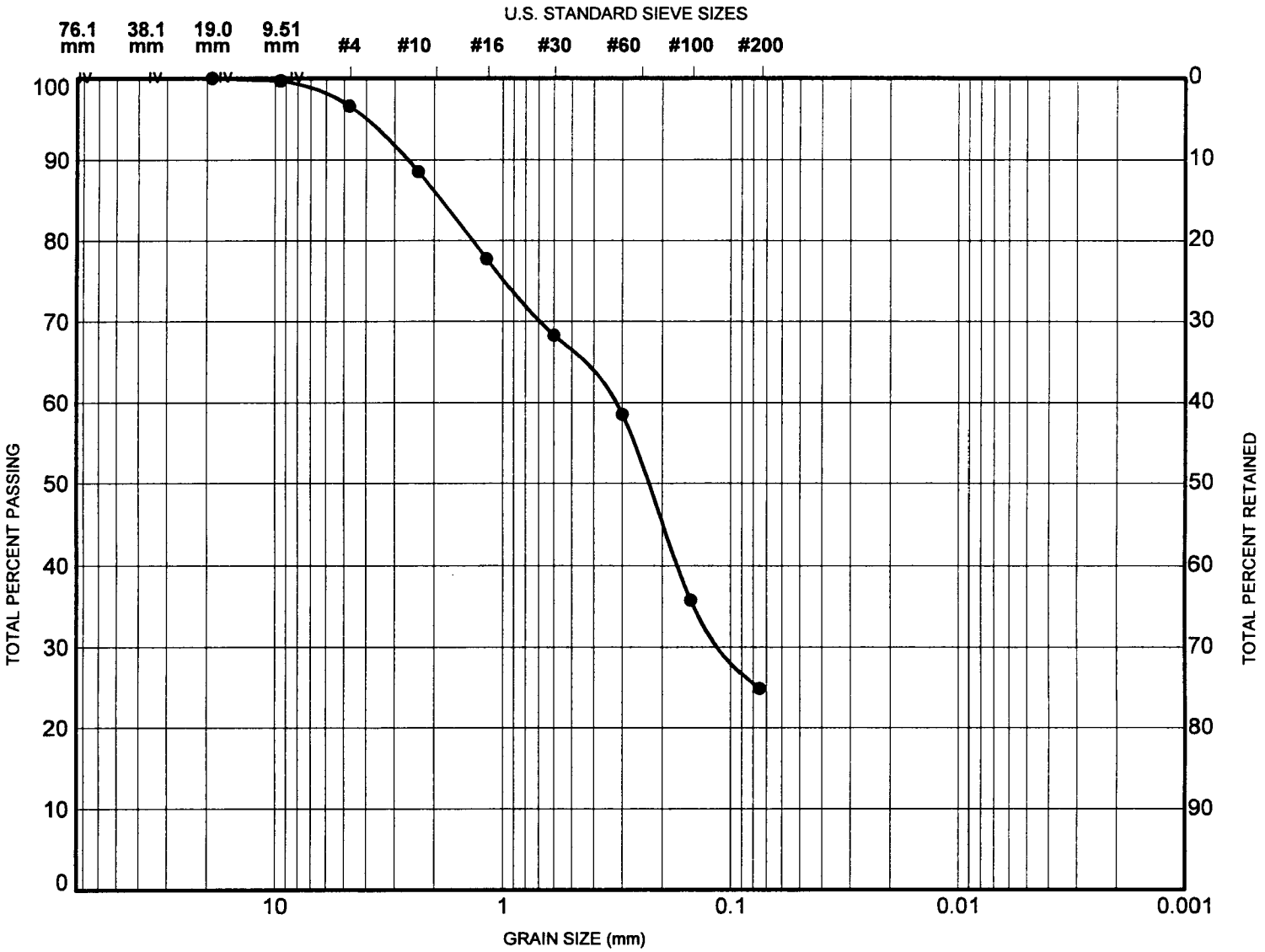
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-134

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SB-32-357	41.1	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

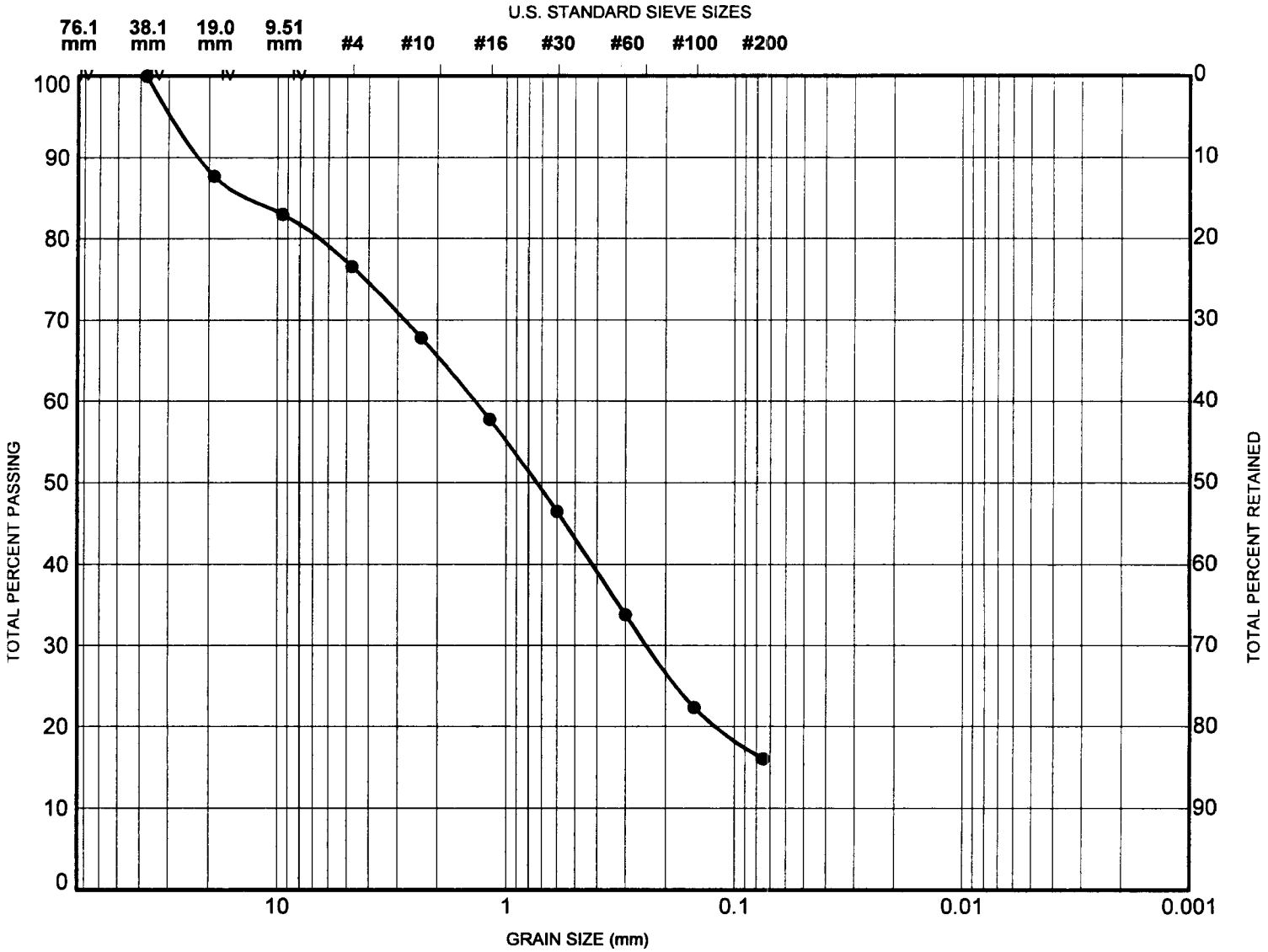
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-135

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	SC-19-275	6.1	Well-Graded SAND with silt and gravel	SW-SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-136

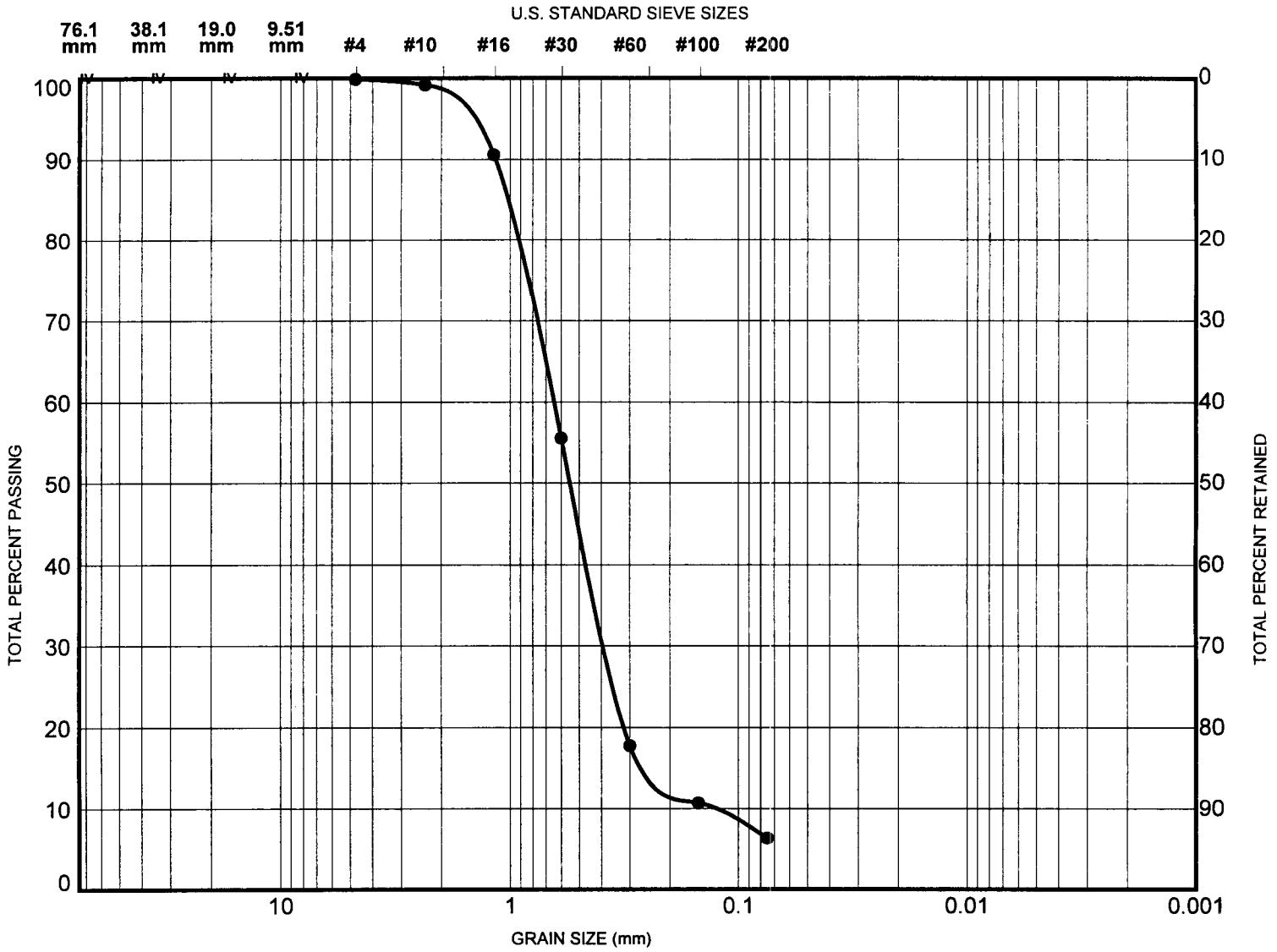
(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB- 1-240	12.8	Poorly graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

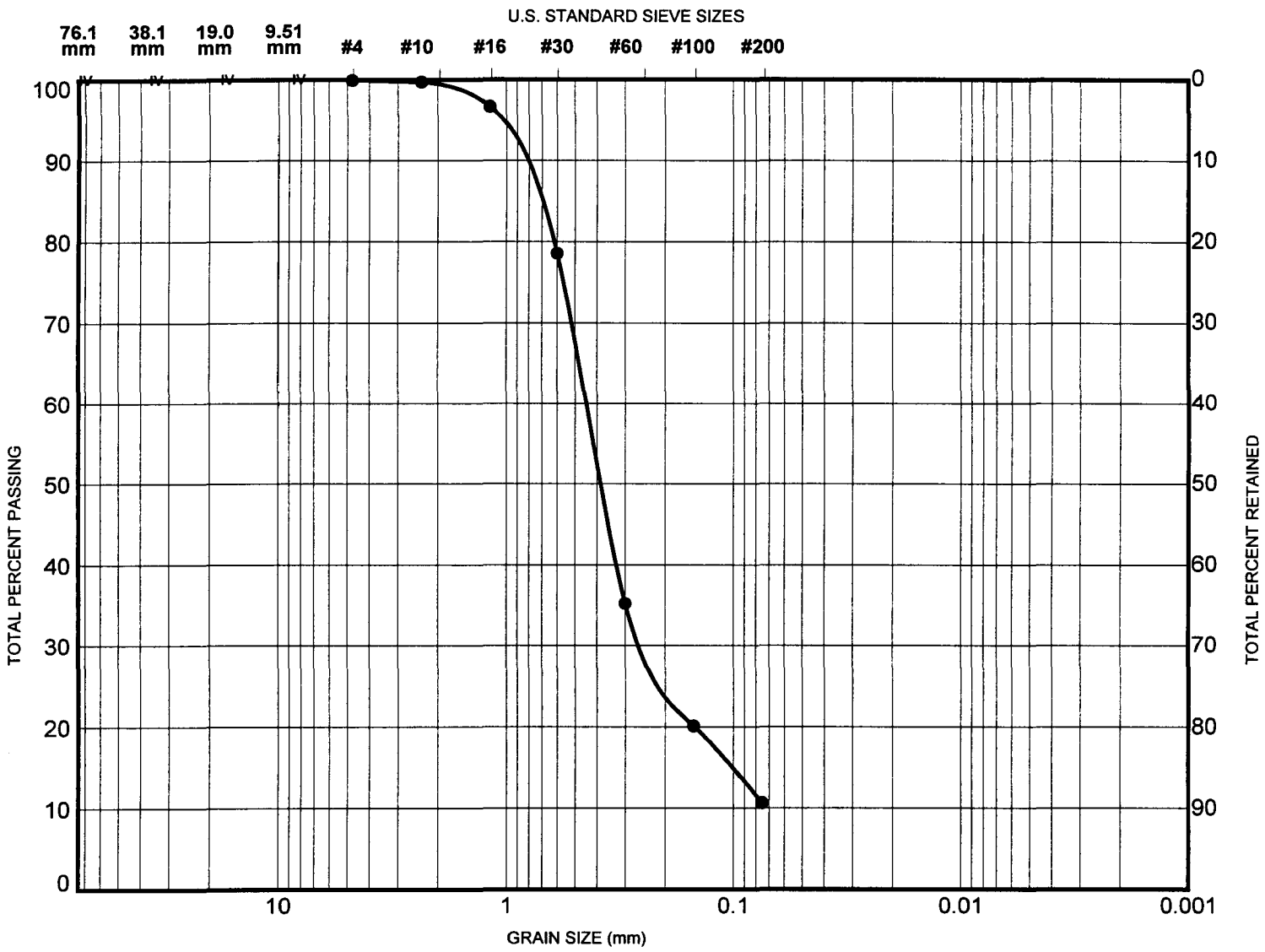
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-142



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB- 4-239	6.7	Poorly Graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

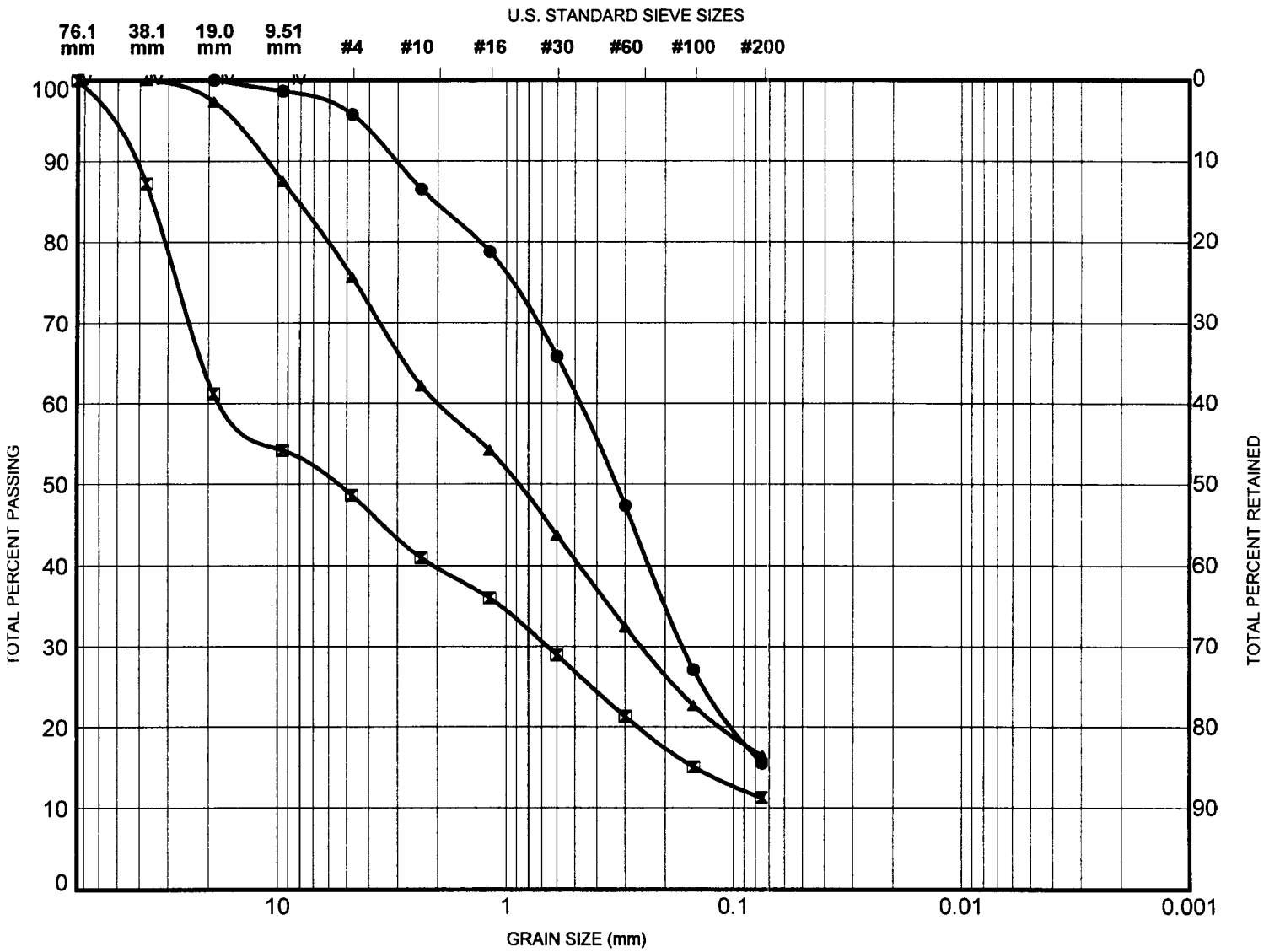
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-143



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB- 9-229	4.6	Silty SAND	SM
⊠	WB- 9-229	6.1	Well Graded GRAVEL with silt	GW-GM
▲	WB- 9-229	13.7	Silty SAND with gravel	SM

KLEINFELDER

PROJECT NO. 35-8163-05

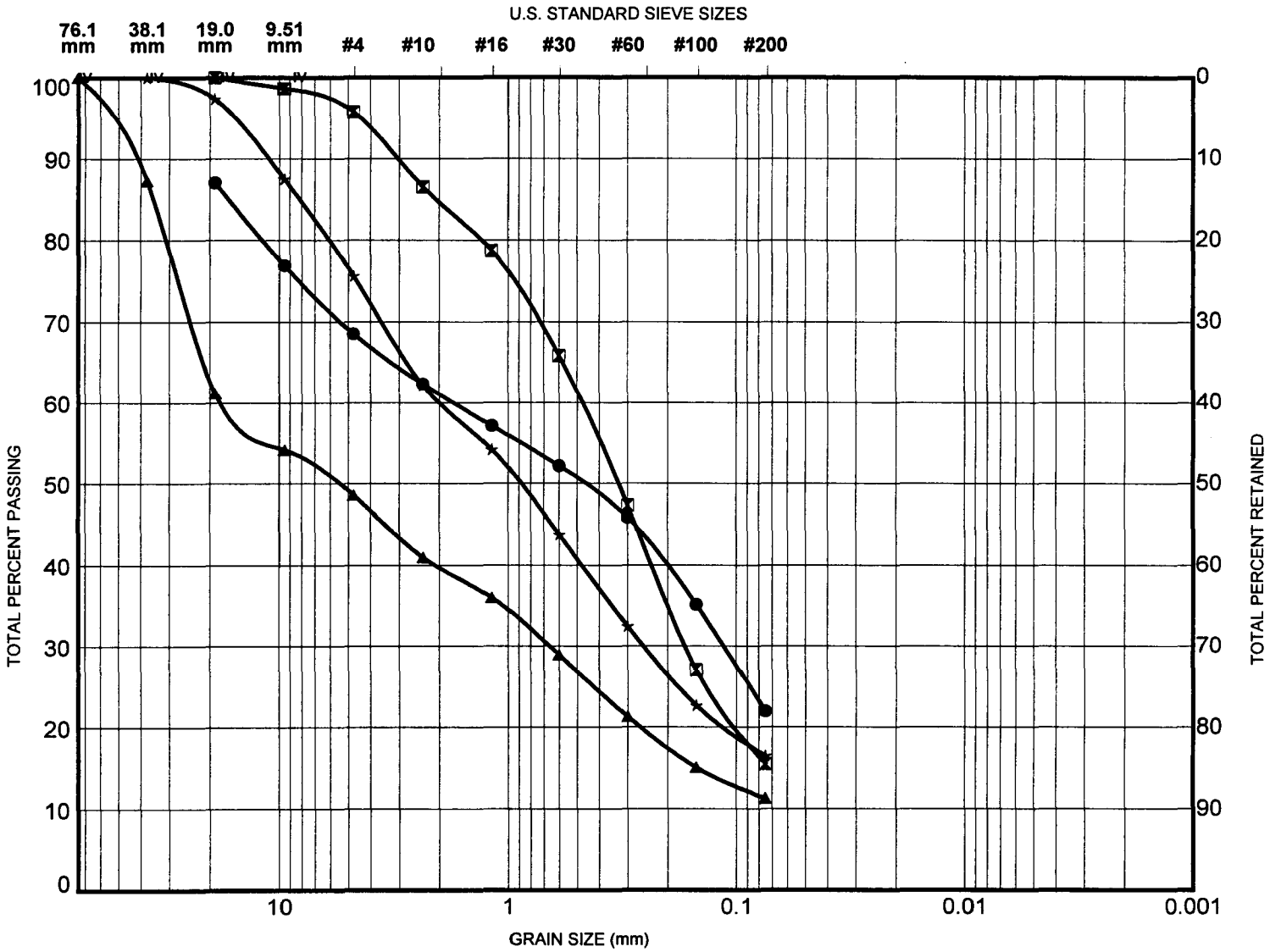
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-144



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB- 9-228	9.8	Silty SAND	SM
⊠	WB- 9-229	4.6	Silty SAND	SM
▲	WB- 9-229	6.1	Well Graded GRAVEL with silt	GW-GM
★	WB- 9-229	13.7	Silty SAND with gravel	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-145

GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-10-233	6.7	Poorly Graded SAND with silt	SP-SM
⊠	WB-10-233	9.8	Silty SAND	SM
▲	WB-10-234	14.3	Poorly Graded SAND	SP
★	WB-10-236	4.6	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

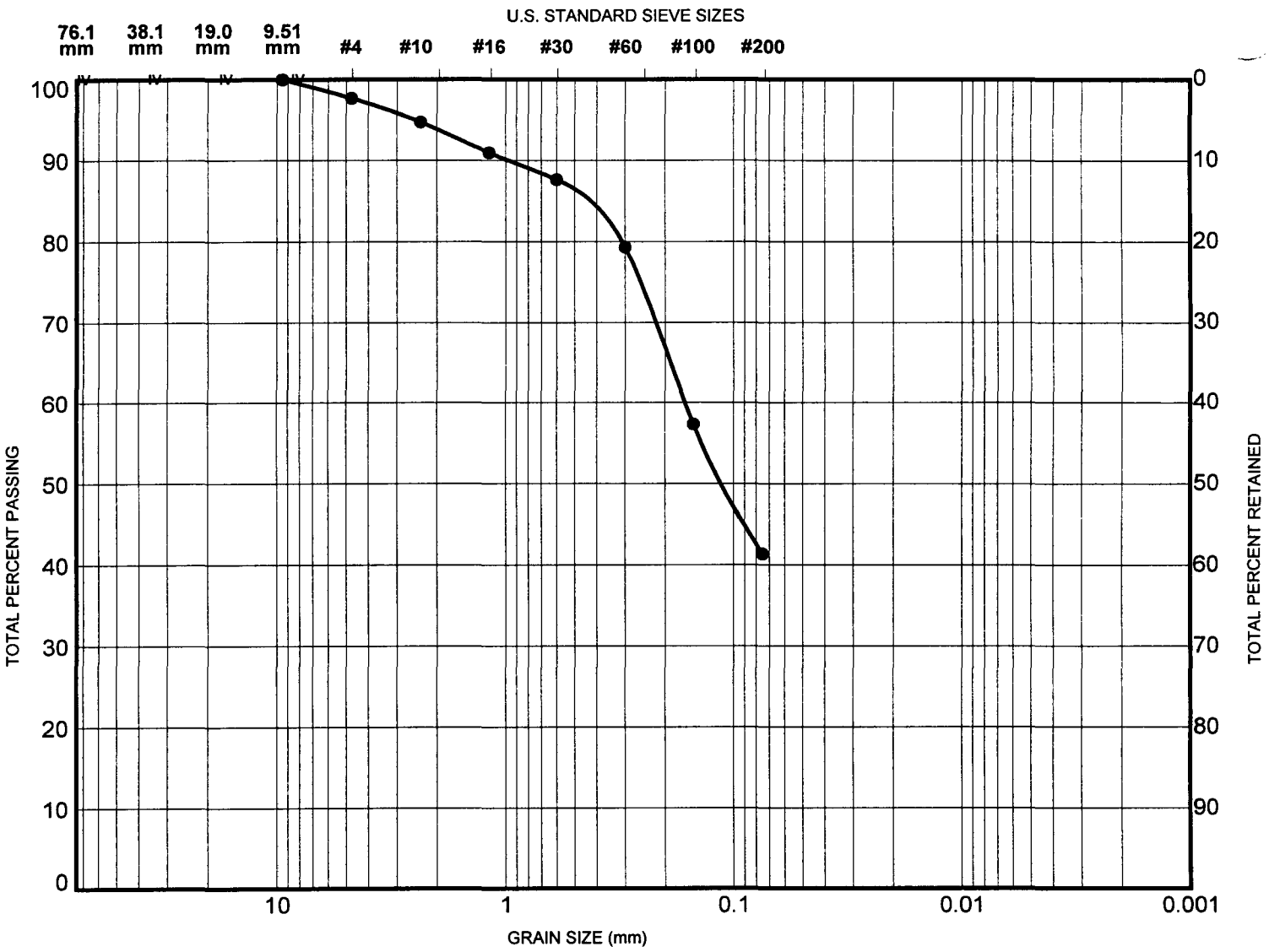
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-146



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-14-238	1.5	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-147

GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-16-222b	3.0	Lean CLAY	CL
⊠	WB-16-222b	6.1	Lean CLAY with sand	CL

KLEINFELDER

PROJECT NO. 35-8163-05

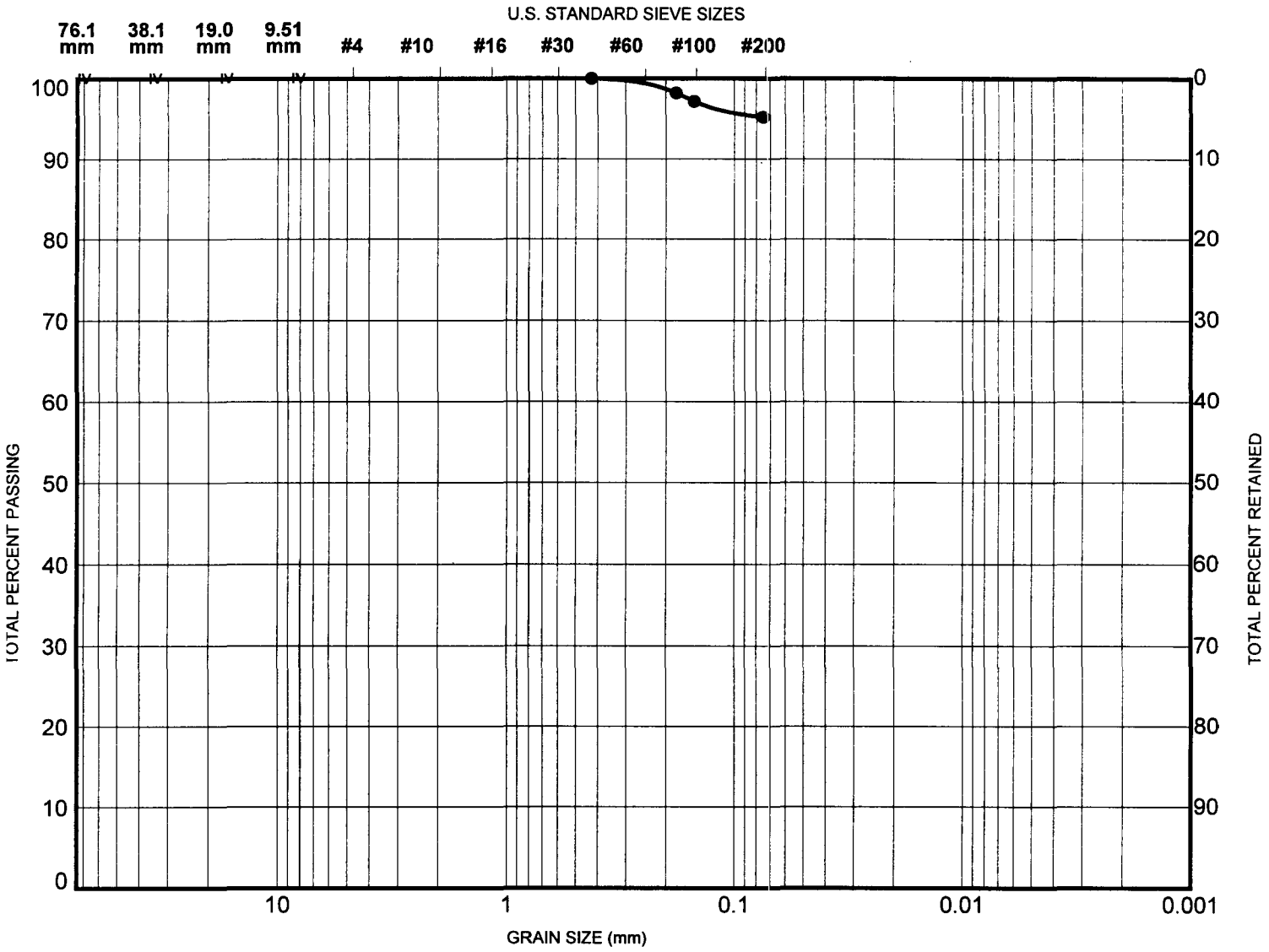
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-148



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-18-216	9.1	Lean CLAY	CL

KLEINFELDER

PROJECT NO. 35-8163-05

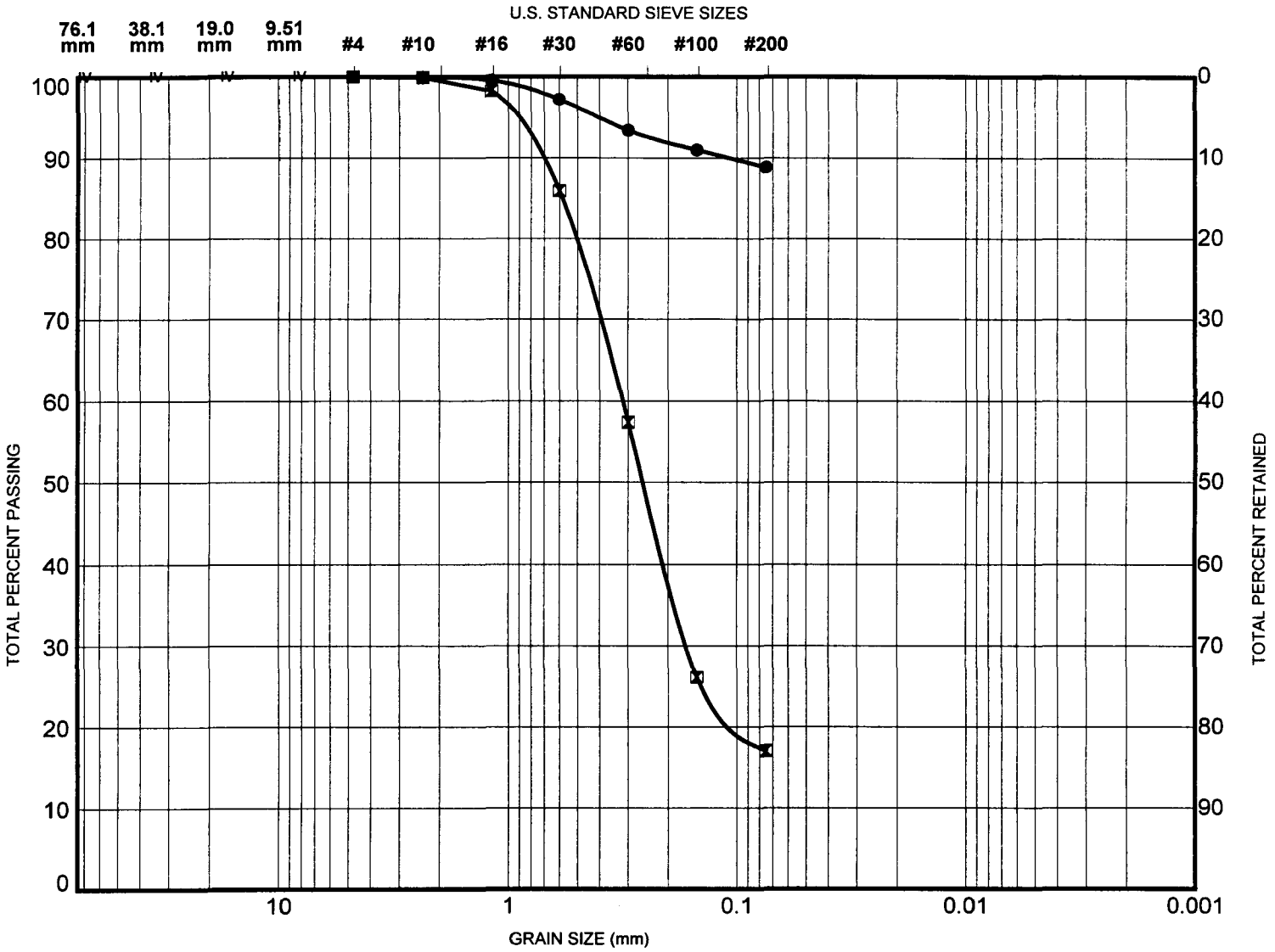
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-149



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-20-211	15.2	Fat CLAY	CH
⊠	WB-22-208	9.4	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

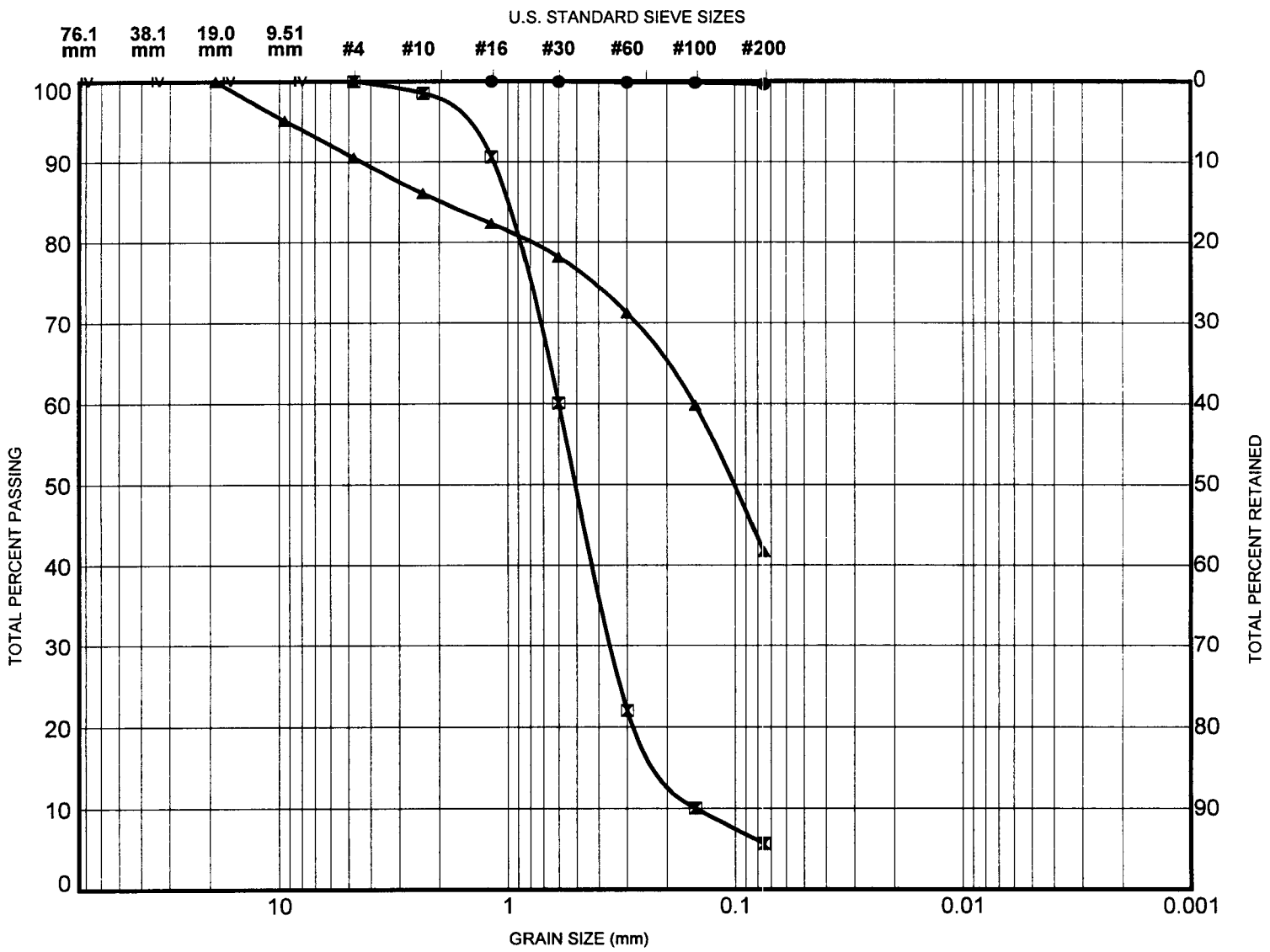
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-150



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	WB-24-202	9.1	Fat CLAY	CH
⊠	WB-24-202	14.3	Well-graded SAND with silt	SW-SM
▲	WB-26-314	1.5	FILL: Silty SAND	

KLEINFELDER

PROJECT NO. 35-8163-05

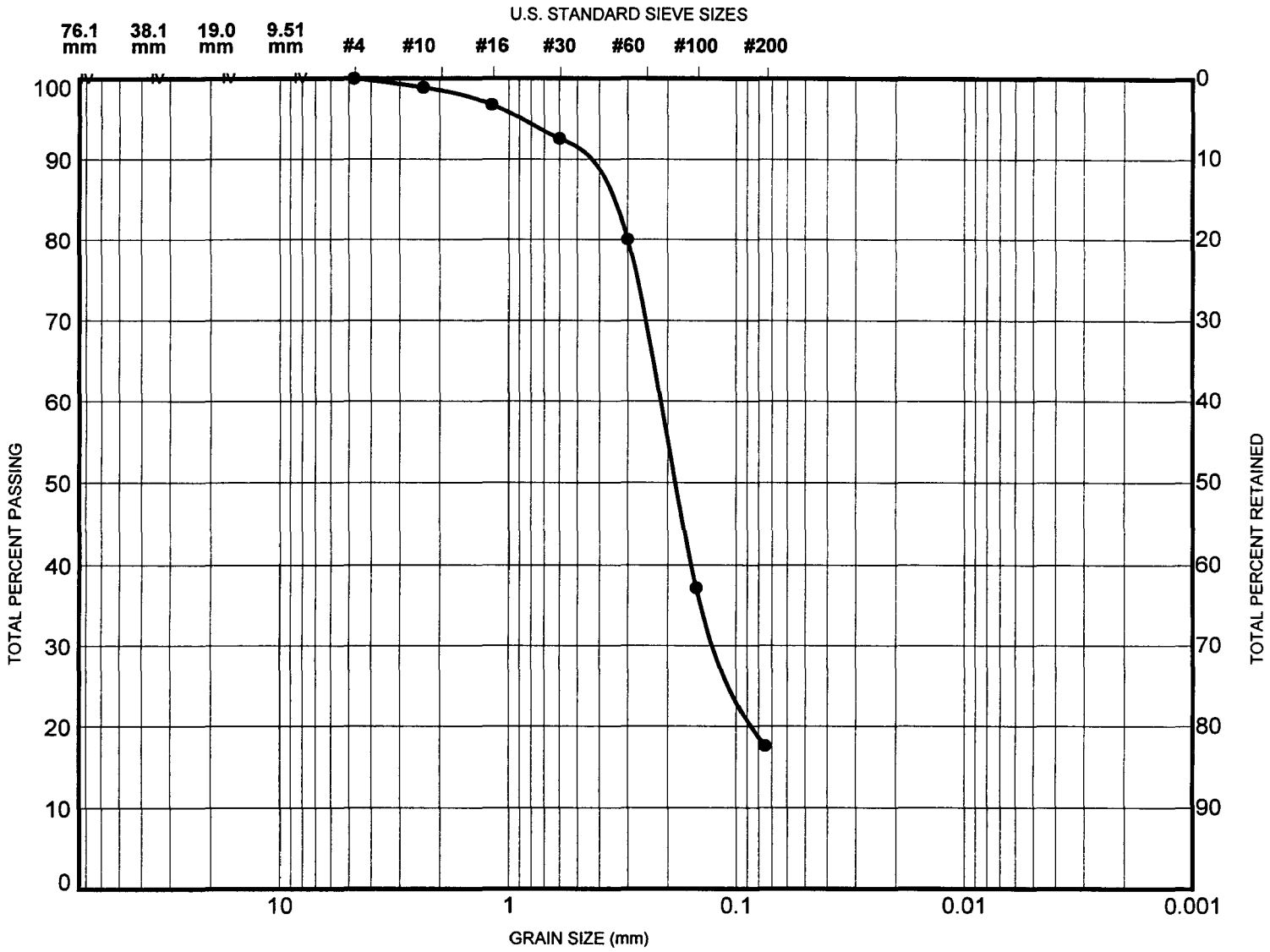
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-151



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-366	7.0	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

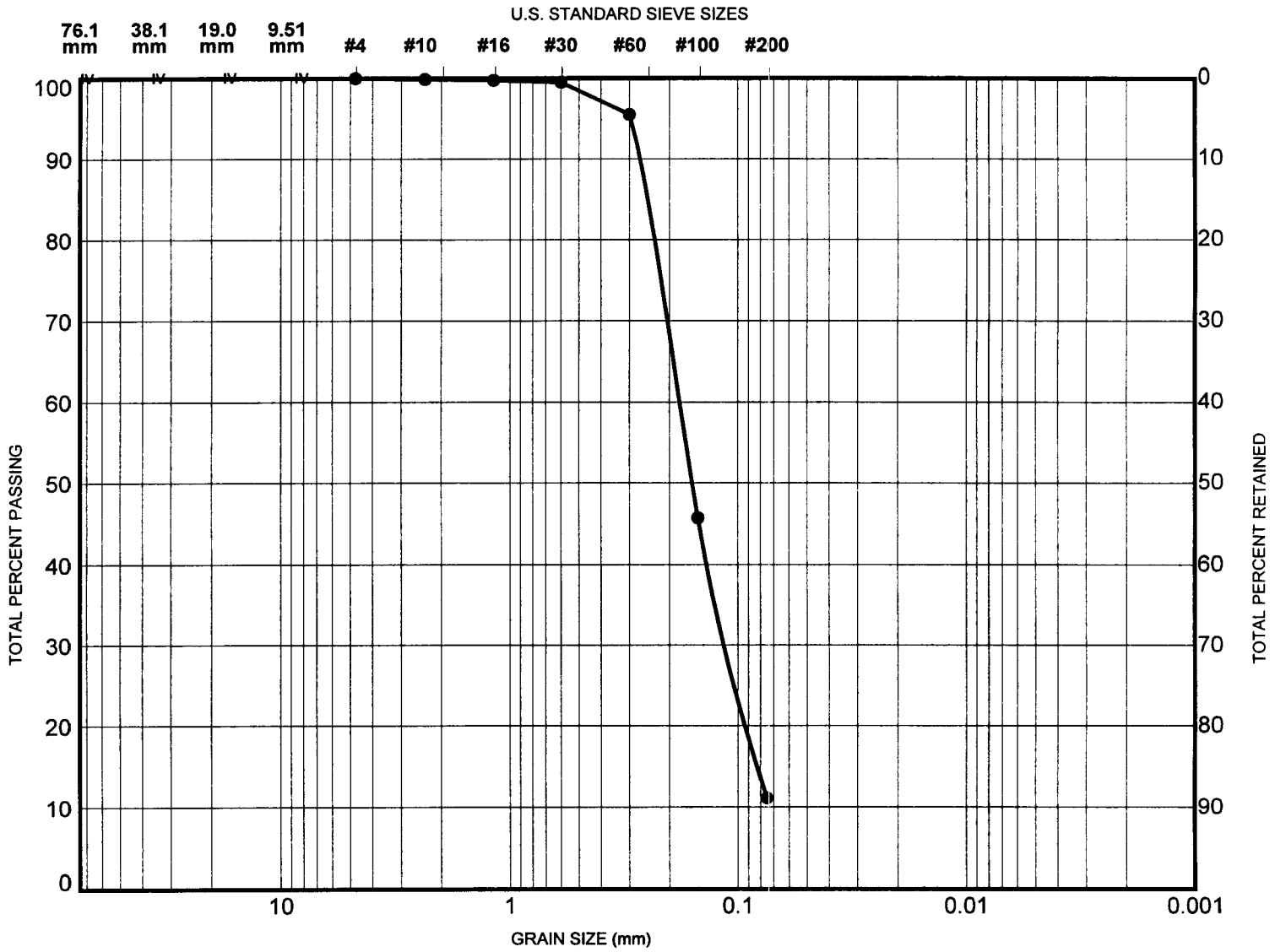
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-152



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-370	35.0	Poorly graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

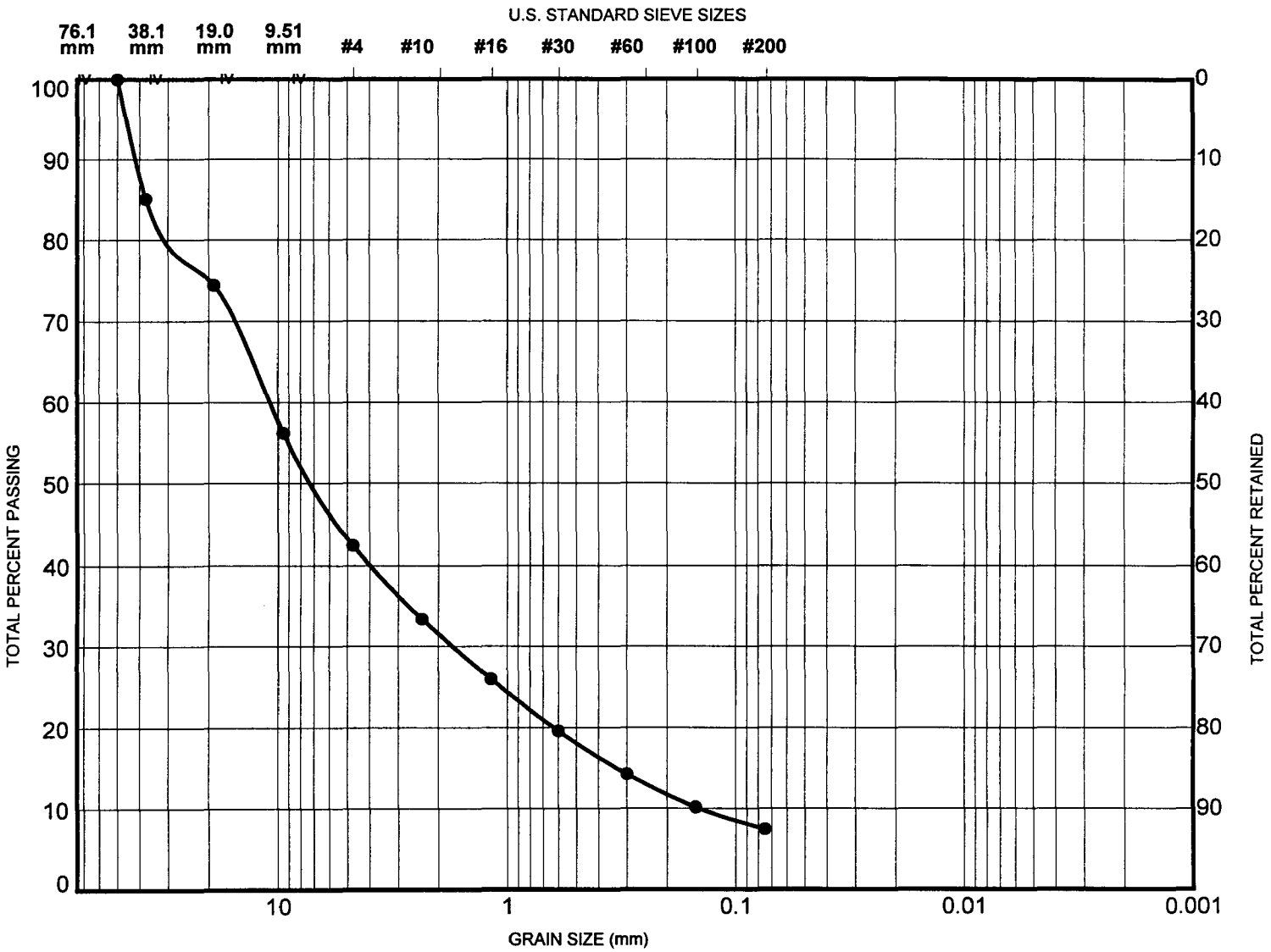
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-153



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-373	15.0	Well-graded GRAVEL with silt and sand	GW-GM

KLEINFELDER

PROJECT NO. 35-8163-05

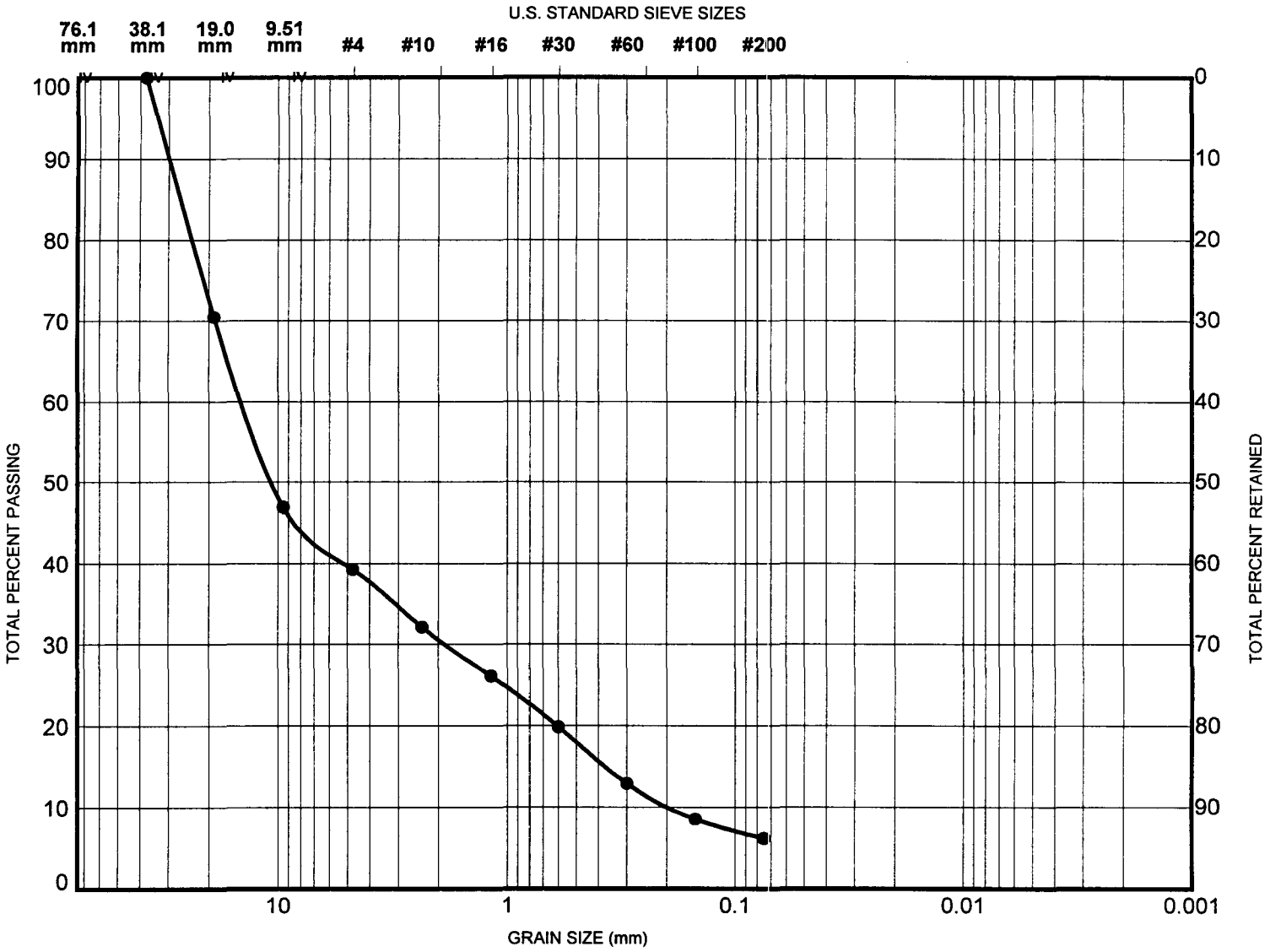
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-154



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-373	42.0	Well-graded GRAVEL with silt and sand	GW-GM

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

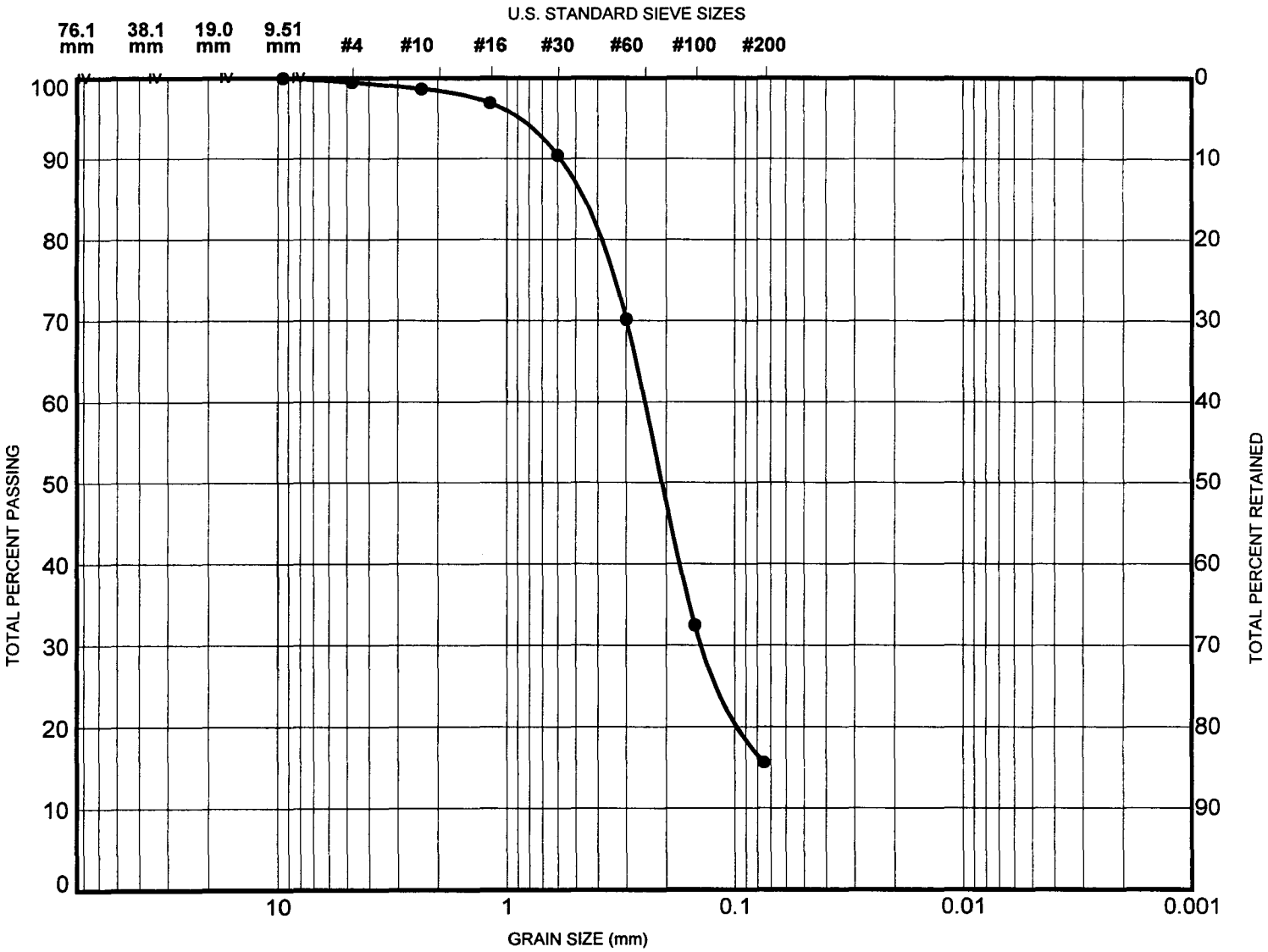
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-155

SIEVE ANALYSIS	HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-382	70.0	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

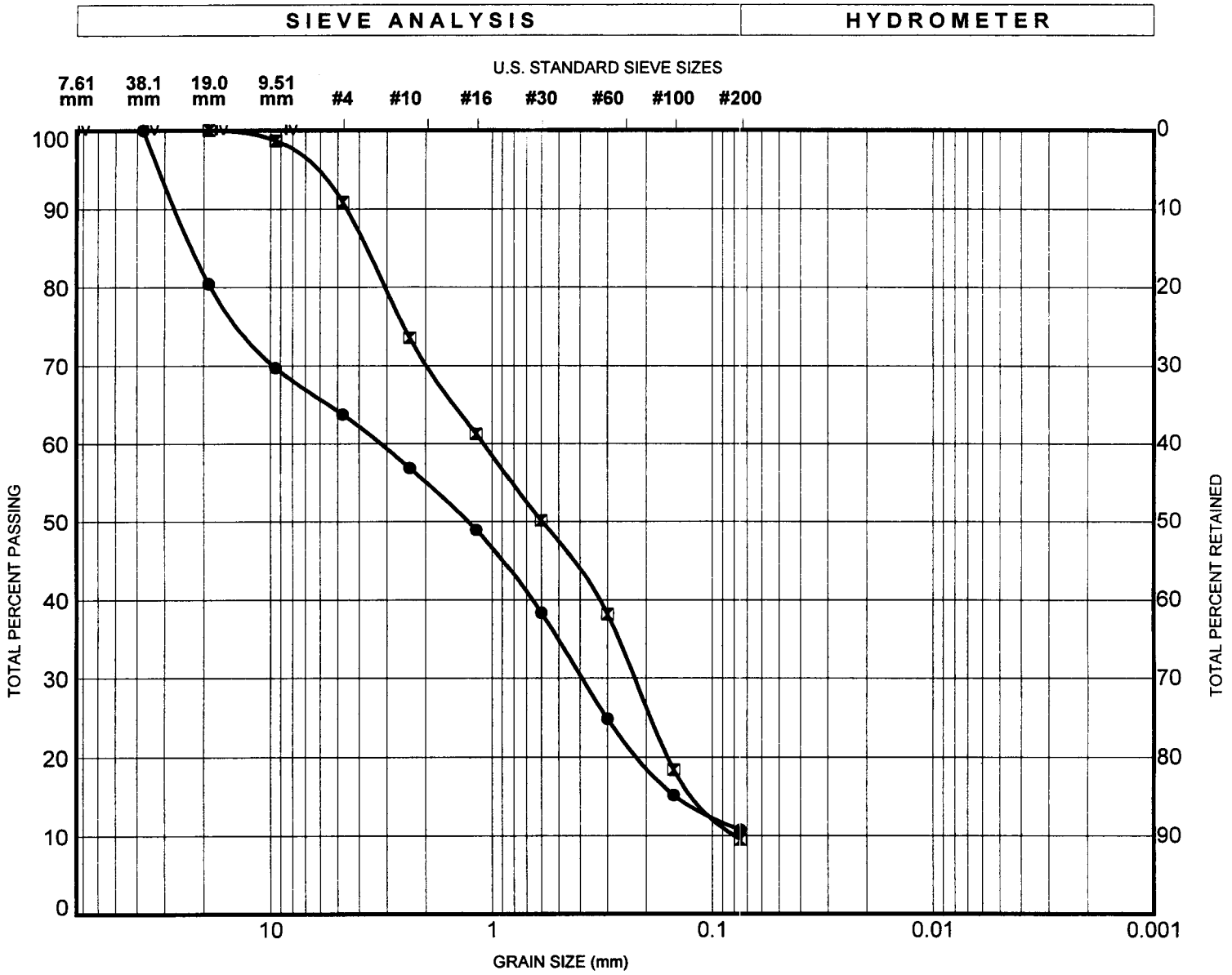
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-156



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-385	16.5	Poorly graded SAND with silt	SP-SM
⊠	RB-385	30.5	Poorly graded SAND with silt	SP-SM

KLEINFELDER

PROJECT NO. 35-8163-05

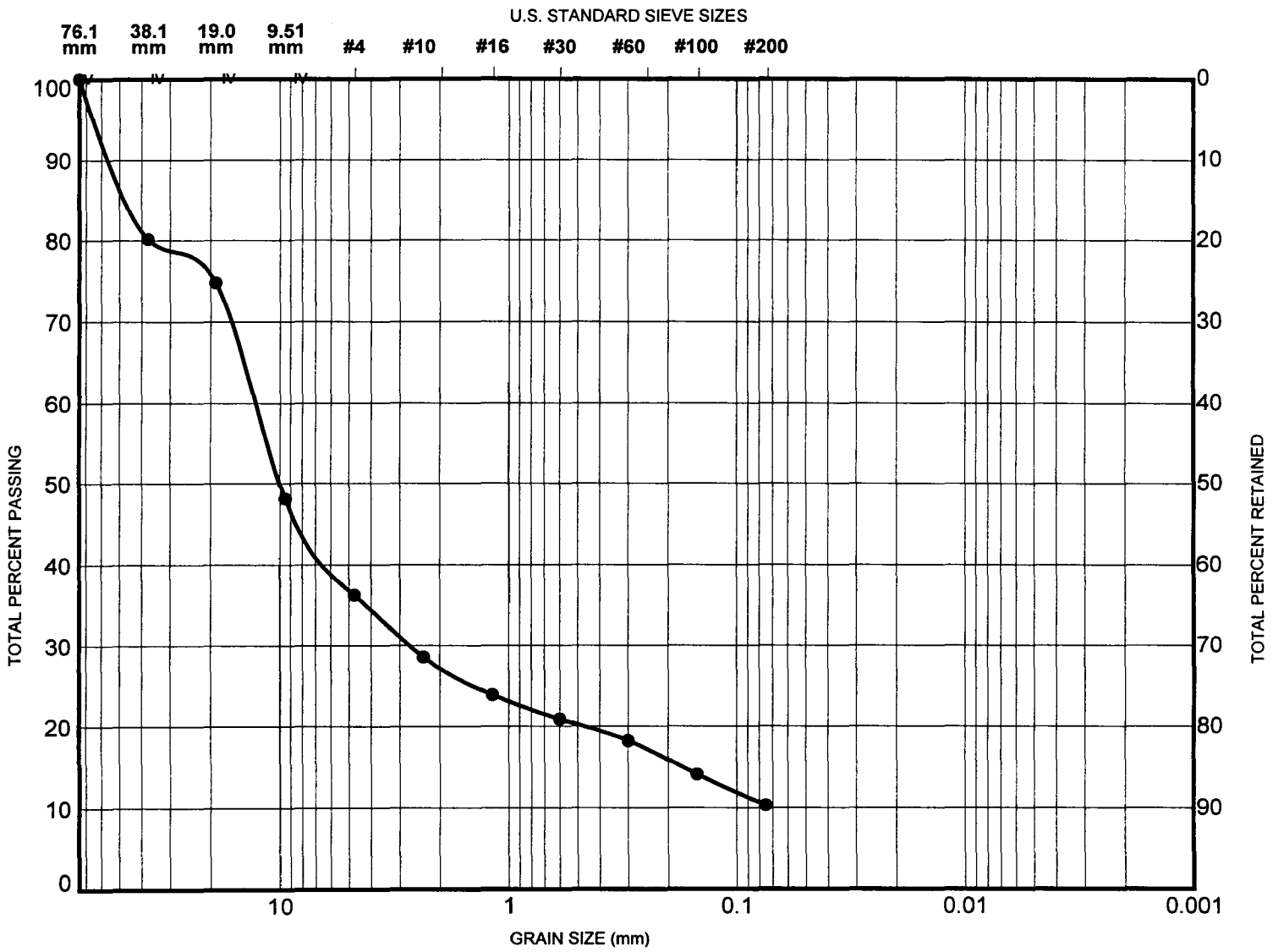
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-157



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-394	0.0	Poorly graded GRAVEL with silt and sand	GP-GM

KLEINFELDER

PROJECT NO. 35-8163-05

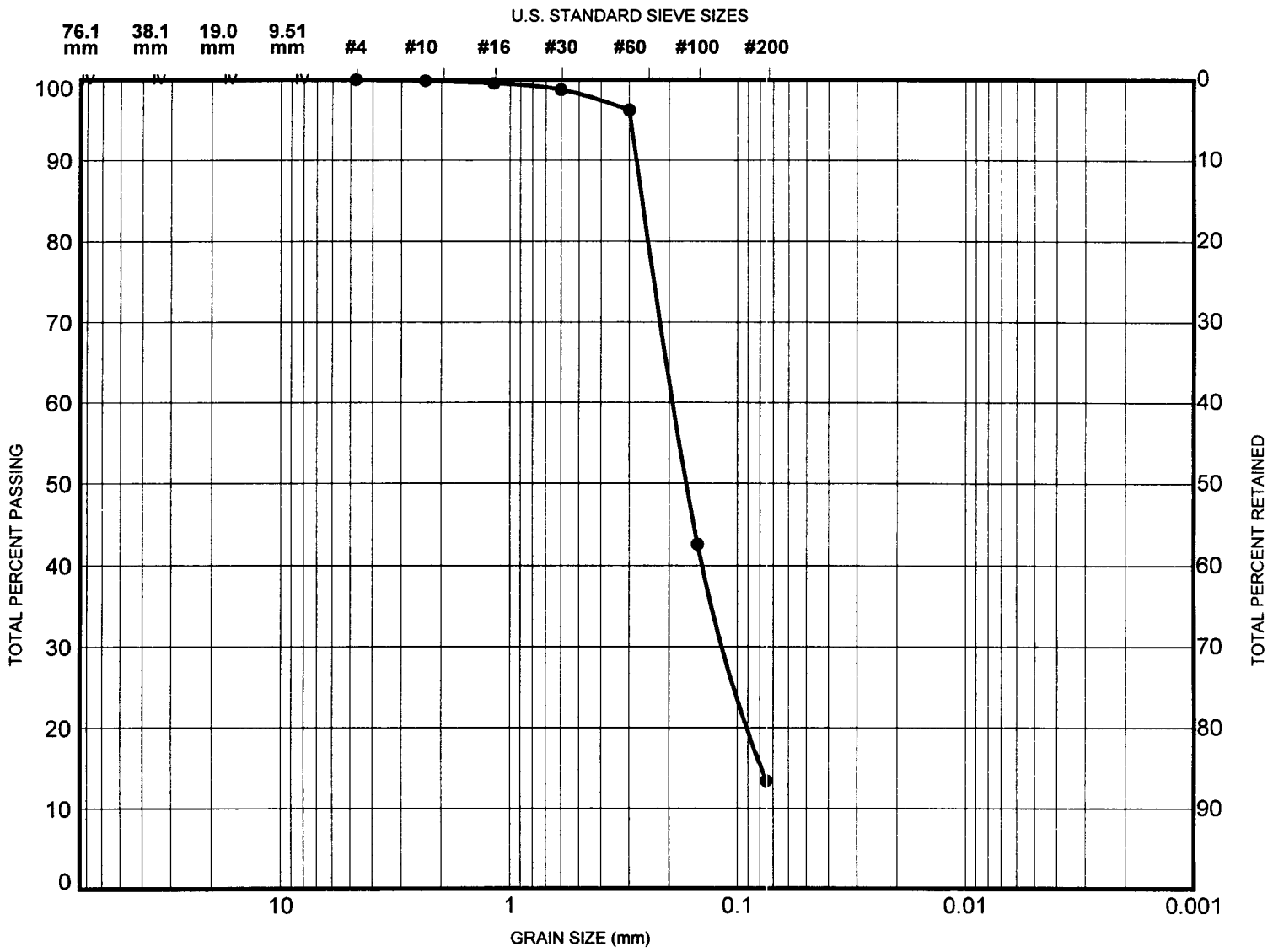
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-158

SIEVE ANALYSIS HYDROMETER



GRAVEL		SAND			SILT	CLAY
coarse	fine	coarse	medium	fine		

Symbol	Sample	Depth (m)	Description	Classification
●	RB-398	27.0	Silty SAND	SM

KLEINFELDER

PROJECT NO. 35-8163-05

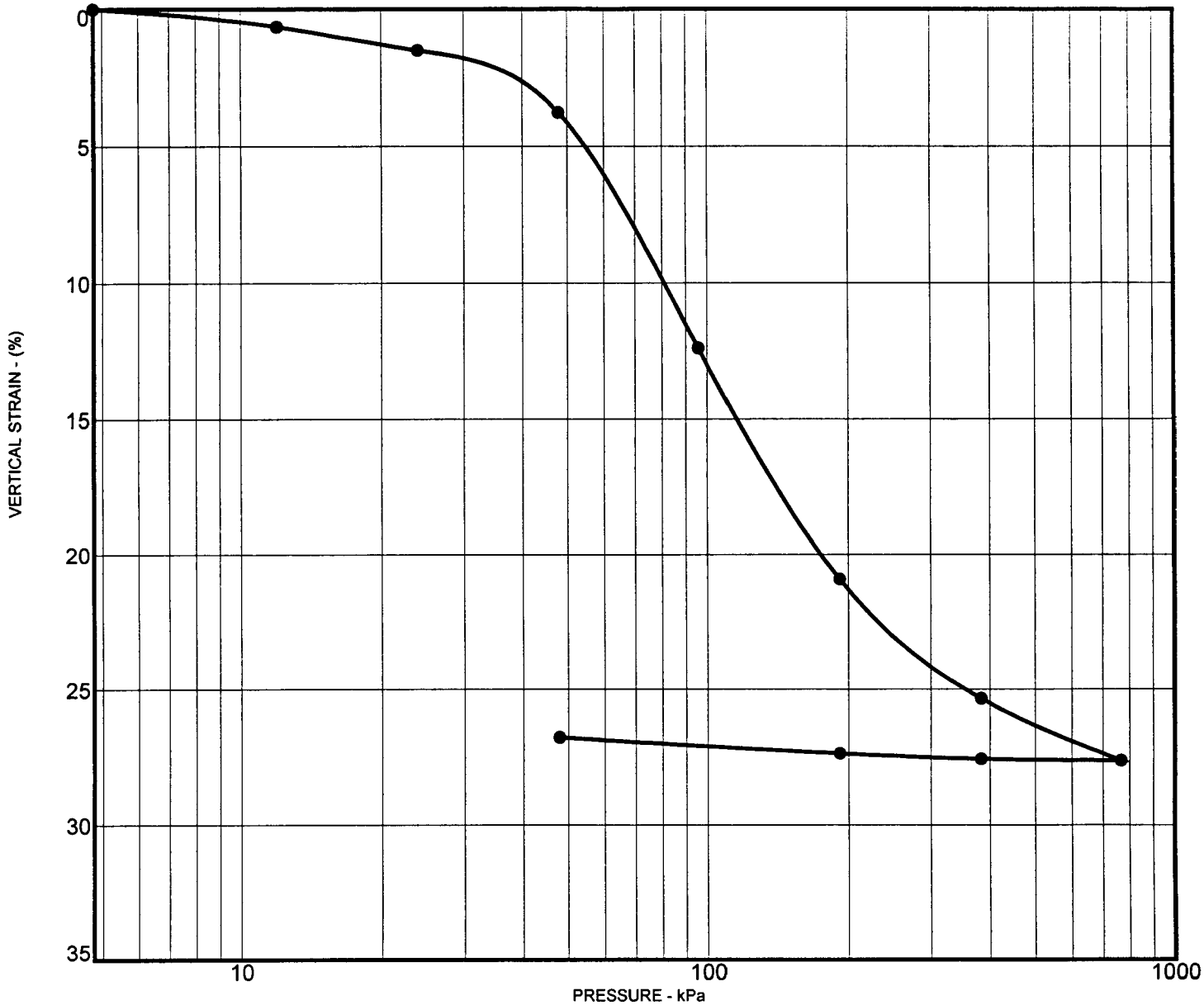
I-215 to I-15/US 89 Interchange

GRAIN SIZE DISTRIBUTION

PLATE

K-159

CONSOLIDATION TEST RESULTS



Sample	SB- 1-243
Depth	4.57 m
Classification	MH

	Initial	Final
Dry density, kN/m^3	8.4	11.4
Water content, %	82.6	51.7
Sample height, mm	25.4	18.5

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-160

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

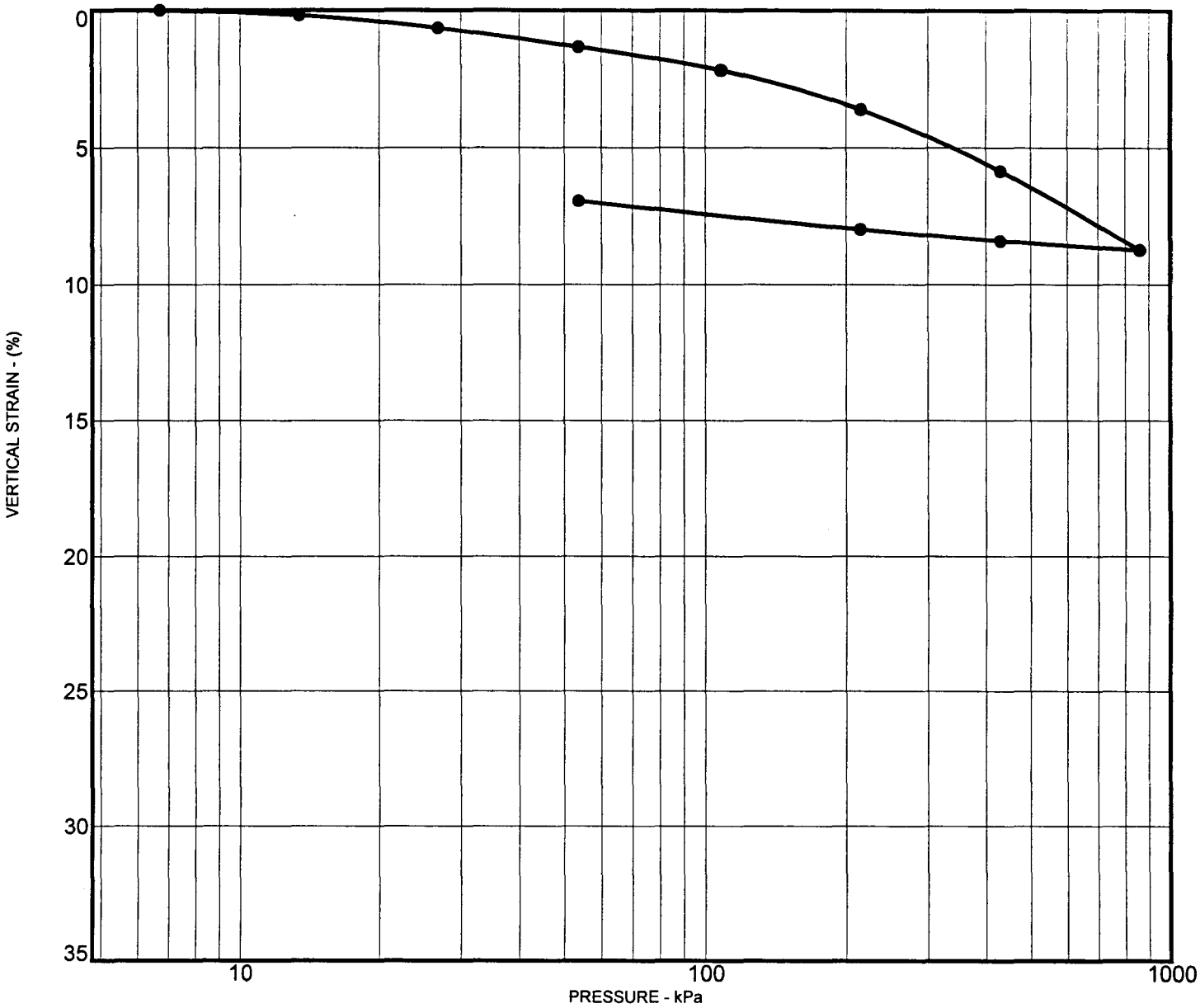
Boring Number:	SB-1-243
Sample Depth:	4.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	160.8	
Ring Weight	45.2	
Wet Wt.	115.6	
Wet + Tare		149.5
Dry + Tare		116.8
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/18/00	14:20:00			0212	
	15:50:00		4.8	0244	0.32
04/19/00	14:00:00		12.0	0309	0.97
	21:20:00		23.9	0396	1.84
04/20/00	16:40:00		47.9	0621	4.09
04/21/00	16:30:00		95.8	1484	12.72
04/22/00	13:00:00		191.5	2336	21.24
04/23/00	12:15:00		383.0	2778	25.66
04/24/00	11:00:00		766.1	3005	27.93
	19:00:00		383.0	2999	27.87
04/25/00	8:15:00		191.5	2979	27.67
	10:30:00		47.9	2920	27.08



Sample	SB- 1-246
Depth	12.19 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	15.2	16.3
Water content, %	29.0	25.2
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-162

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

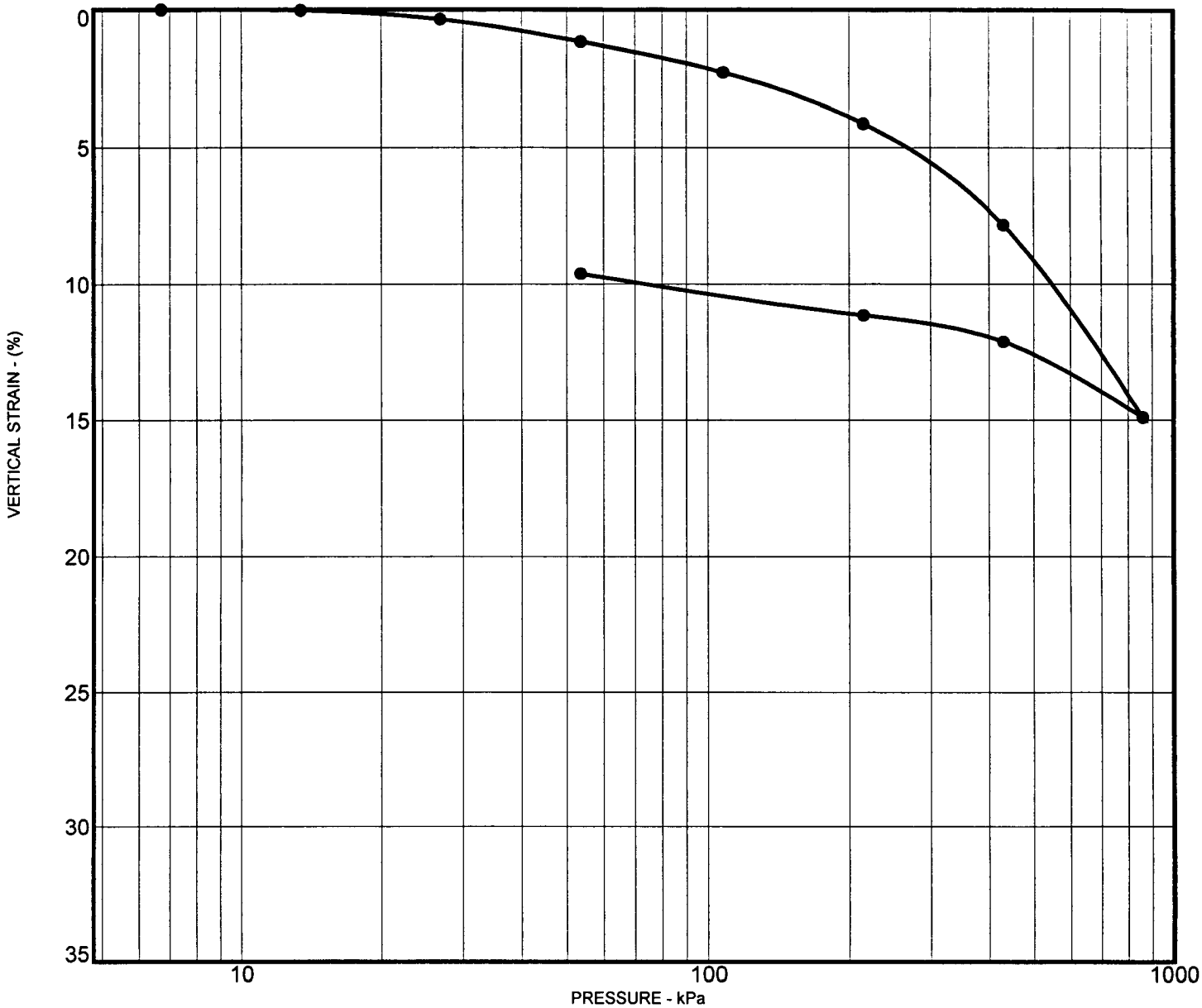
Boring Number:	SB-1-246
Sample Depth:	12.2 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	193.7	
Ring Weight	45.5	
Wet Wt.	148.2	
Wet + Tare		197.9
Dry + Tare		169
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/22/00	12:30:00			0206	
	13:45:00		6.7	0221	0.15
04/23/00	9:30:00		13.4	0240	0.34
	15:20:00		26.8	0287	0.81
04/24/00	7:40:00		53.6	0356	1.50
	19:00:00		107.7	0440	2.34
04/25/00	13:30:00		215.0	0583	3.77
04/26/00	11:45:00		430.0	0806	6.00
04/27/00	7:00:00		859.9	1094	8.88
	17:00:00		430.0	1061	8.55
04/28/00	8:45:00		215.0	1019	8.13
	13:25:00		53.6	0916	7.10



Sample	SB- 1-246
Depth	22.86 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.4	15.9
Water content, %	31.7	27.1
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-164

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

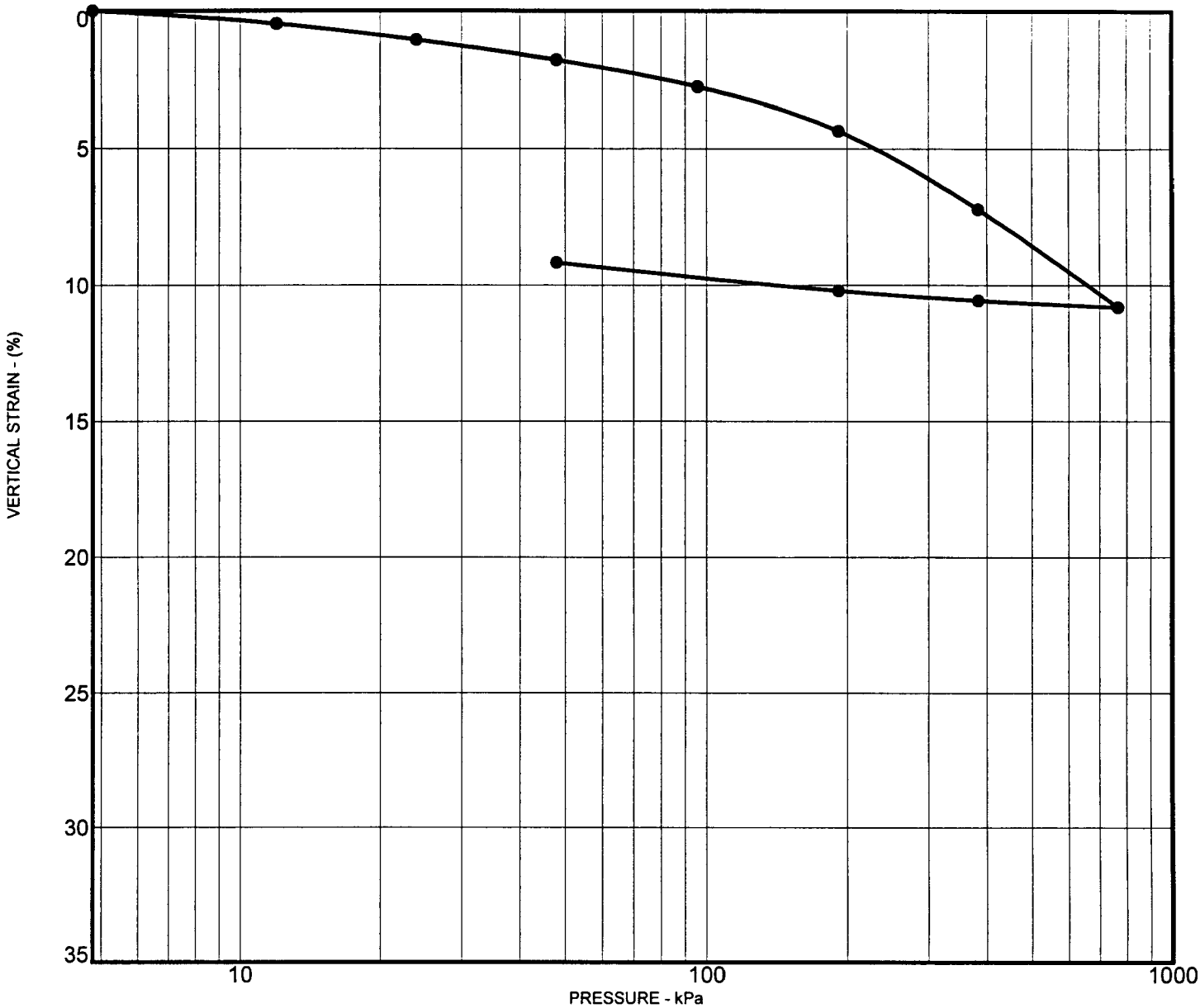
Boring Number:	SB-1-246
Sample Depth:	22.9 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	188.8	
Ring Weight	45.5	
Wet Wt.	143.3	
Wet + Tare		192.1
Dry + Tare		162.6
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	27.0
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/22/00	12:45:00			0628	
	13:40:00		6.7	0631	0.03
04/23/00	8:00:00		13.4	0634	0.06
	15:20:00		26.8	0666	0.38
04/24/00	7:40:00		53.6	0746	1.18
	19:00:00		107.7	0859	2.31
04/25/00	13:30:00		215.0	1045	4.17
04/26/00	11:45:00		430.0	1413	7.85
04/27/00	7:00:00		859.9	2121	14.93
	17:00:00		430.0	1844	12.16
04/28/00	8:45:00		215.0	1746	11.18
04/29/00	10:55:00		53.6	1593	9.65



Sample	SB- 2-247
Depth	4.57 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.7	15.0
Water content, %	34.0	28.5
Sample height, mm	25.4	23.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-166

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

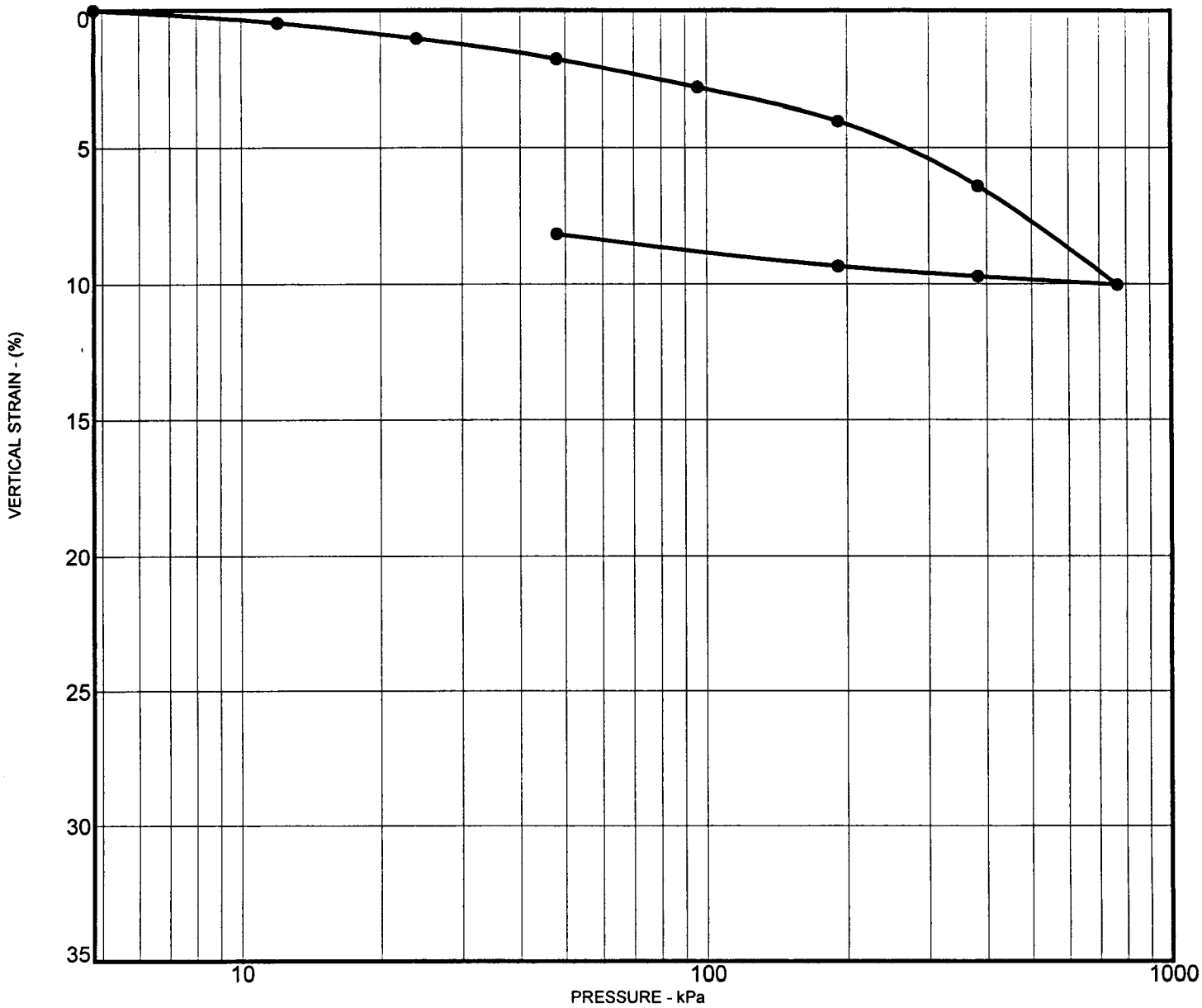
Boring Number:	SB-2-247
Sample Depth:	4.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	183.8	
Ring Weight	45.1	
Wet Wt.	138.7	
Wet + Tare		186.6
Dry + Tare		157.1
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/23/00	9:00:00			0203	
	12:00:00		4.8	0244	0.41
	16:50:00		12.0	0292	0.89
02/24/00	7:30:00		23.9	0351	1.48
	13:40:00		47.9	0424	2.21
02/25/00	7:45:00		95.8	0520	3.17
02/26/00	10:00:00		191.5	0680	4.77
02/27/00	8:30:00		383.0	0964	7.61
02/28/00	11:20:00		766.1	1325	11.22
	15:30:00		383.0	1301	10.98
	19:00:00		191.5	1265	10.62
02/29/00	8:00:00		47.9	1160	9.57



Sample	SB- 2-247
Depth	18.29 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.6	17.0
Water content, %	27.9	24.2
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-168

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

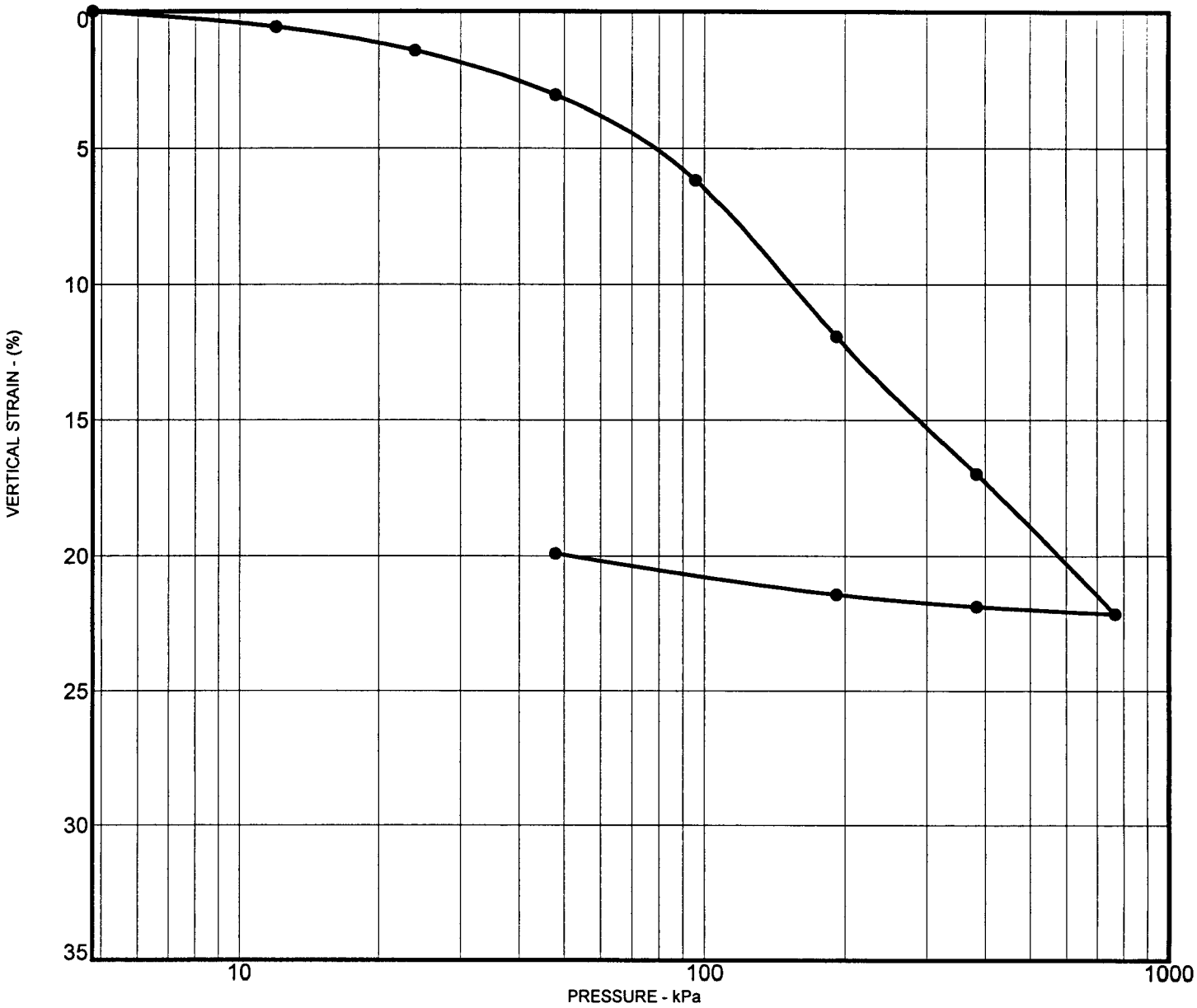
Boring Number:	SB-2-247
Sample Depth:	18.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	196.9	
Ring Weight	45.6	
Wet Wt.	151.3	
Wet + Tare		200.9
Dry + Tare		172.3
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/08/00	18:25:00			0205	
	19:00:00		4.8	0472	2.67
02/09/00	7:40:00		12.0	0519	3.14
	5:15:00		23.9	0576	3.71
	19:00:00		47.9	0650	4.45
02/10/00	11:30:00		95.8	0754	5.49
	19:00:00		191.5	0876	6.71
02/11/00	14:00:00		383.0	1113	9.08
02/12/00	9:30:00		766.1	1475	12.70
02/13/00	8:10:00		383.0	1444	12.39
	17:30:00		191.5	1407	12.02
02/14/00	7:00:00		47.9	1288	10.83



Sample	SB- 3-248
Depth	7.62 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	11.1	13.9
Water content, %	52.1	34.5
Sample height, mm	25.4	20.3

KLEINFELDER

PROJECT NO. 35-8163-05

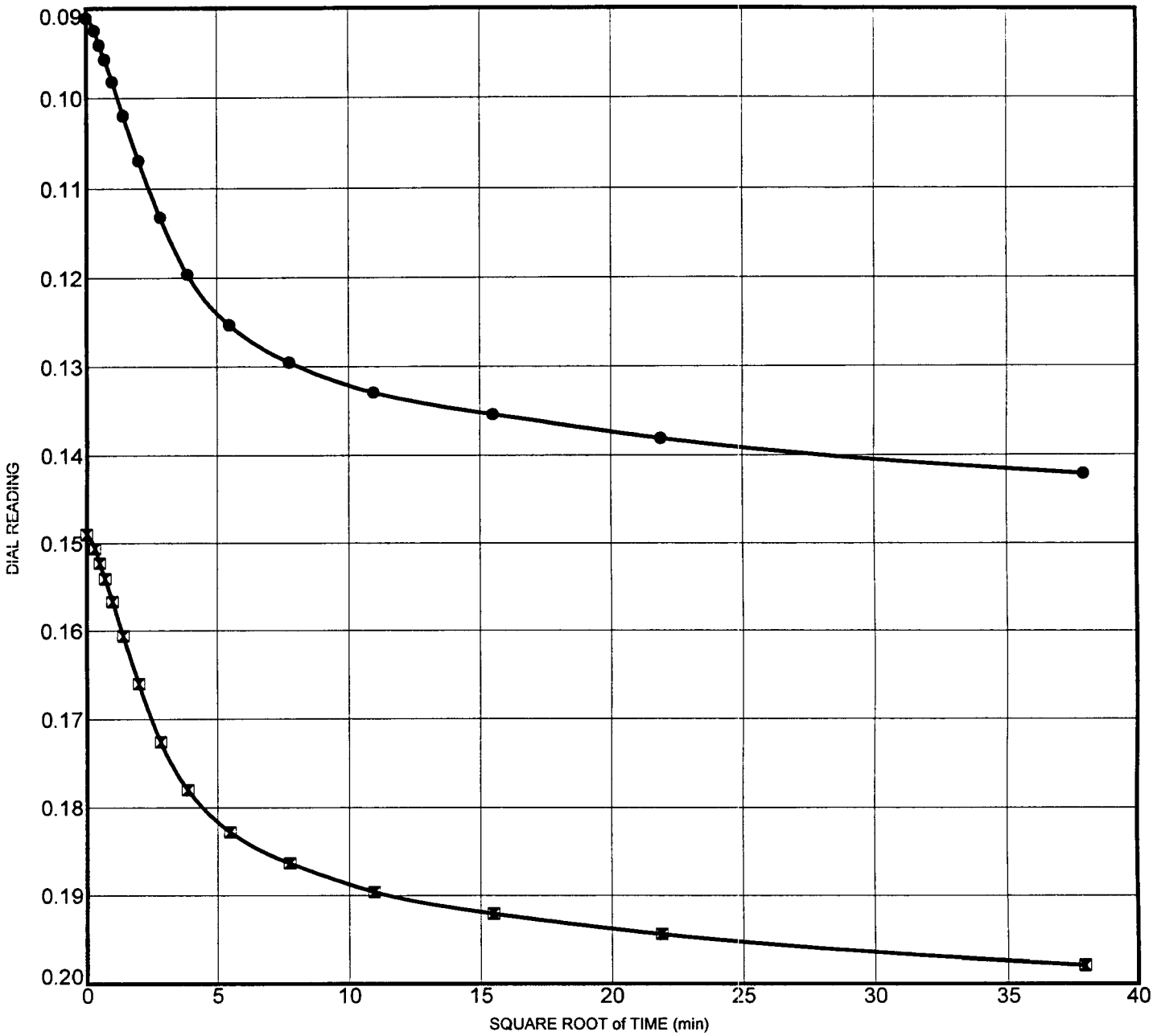
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-170



Sample	**SB- 3-248**	
Depth	**7.6 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

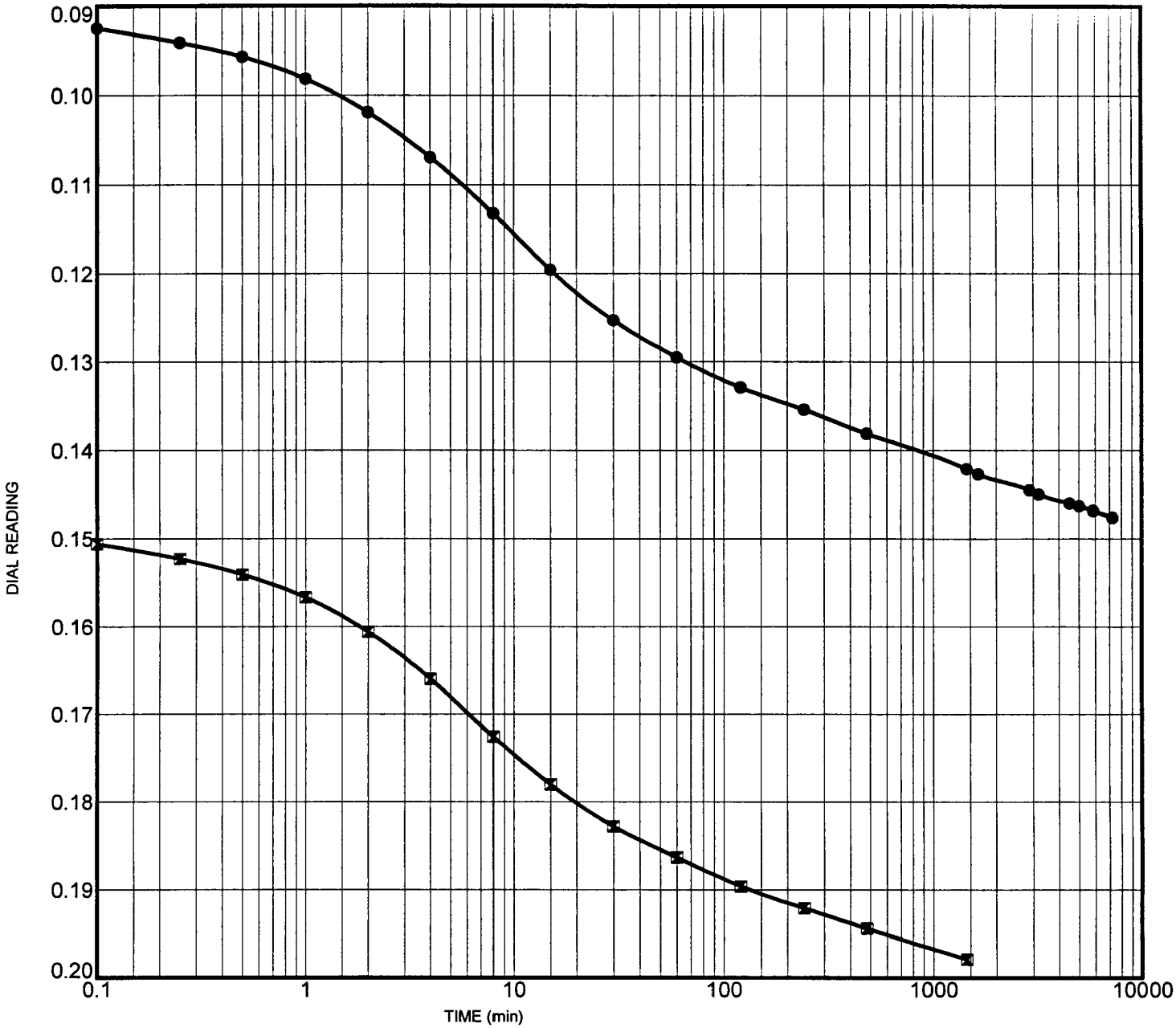
I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-171

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00



Sample	**SB- 3-248**	
Depth	**7.6 m**	
Pressure (kPa)	● **0.19**	⊠ **0.38**
Ca (m /day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

SECONDARY CONSOLIDATION

PLATE

K-172

PROJECT NO. **35-8163-05**

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-2-248
Sample Depth:	7.6 m

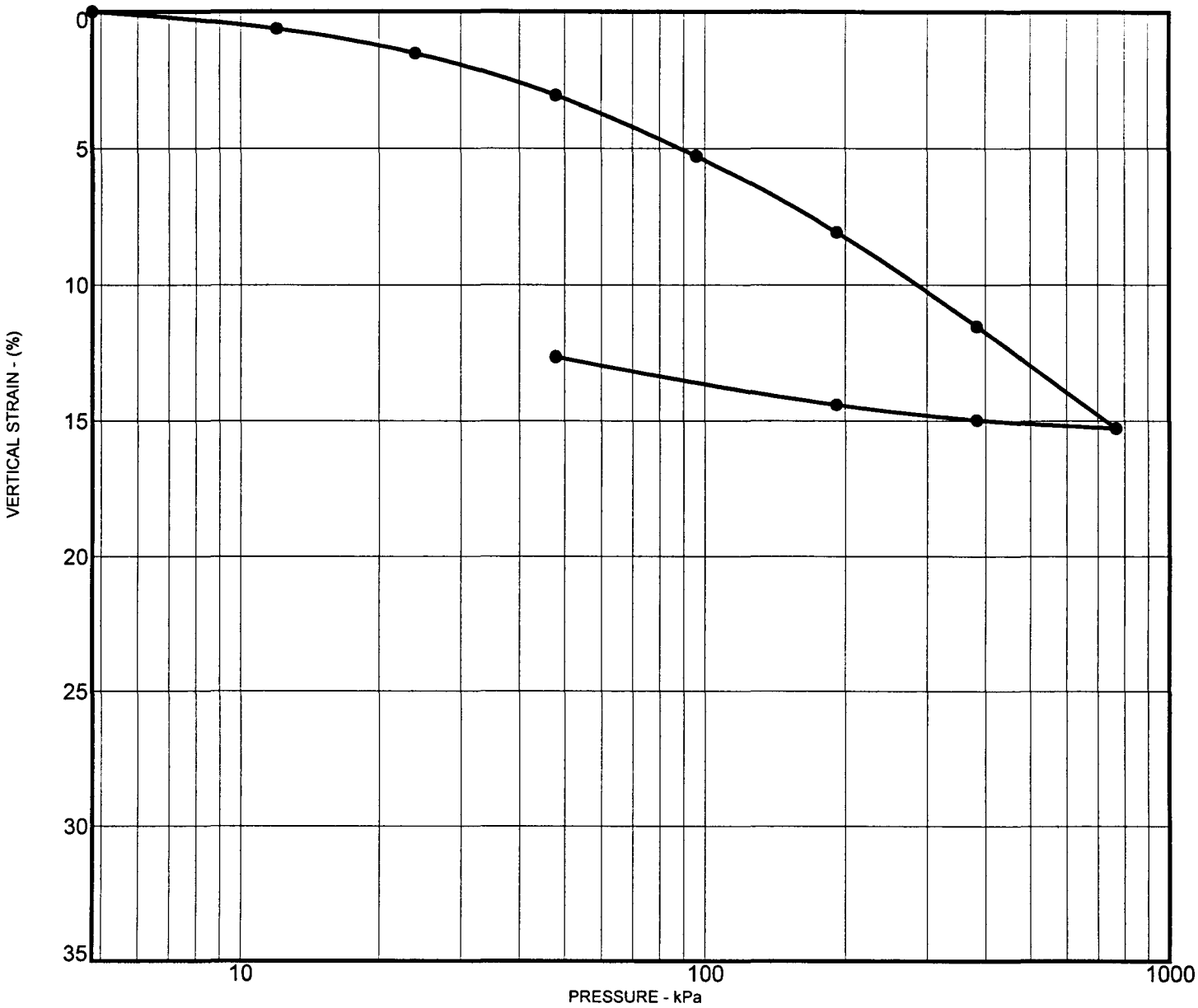
	Before Test (g)	After Test (g)
Wet Wt. + Ring	173.2	
Ring Weight	45.3	
Wet Wt.	127.9	
Wet + Tare		167
Dry + Tare		138
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	21.5
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/20/00	9:40:00			0247	
	17:15:00		4.8	0282	0.35
02/21/00	8:20:00		12.0	0339	0.92
	16:00:00		23.9	0426	1.79
02/22/00	10:25:00		47.9	0588	3.41
02/23/00	7:45:00		95.8	0899	6.52
	8:00:00	0:00:00	191.5	0911	6.64
	8:00:06	0:00:06		0925	
	8:00:15	0:00:15		0941	
	8:00:30	0:00:30		0957	
	8:01:00	0:01:00		0982	
	8:02:00	0:02:00		1019	
	8:04:00	0:04:00		1069	
	8:08:00	0:08:00		1132	
	8:15:00	0:15:00		1196	
	8:30:00	0:30:00		1253	
	9:00:00	1:00:00		1295	
	10:00:00	2:00:00		1329	
	12:00:00	4:00:00		1354	
	16:00:00	8:00:00		1381	
02/24/00	8:00:00	24:00:00		1421	
	11:15:00	27:15:00		1427	
02/25/00	8:00:00	48:00:00		1445	
	13:20:00	53:20:00		1450	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/26/00	11:00:00	75:00:00		1460	
	19:30:00	82:30:00		1463	
02/27/00	8:30:00	96:30:00		1468	
02/28/00	7:50:00	119:50:00	191.5	1476	12.29
	8:03:00	0:00:00	383.0	1490	12.43
	8:03:06	0:00:06		1506	
	8:03:15	0:00:15		1523	
	8:03:30	0:00:30		1541	
	8:04:00	0:01:00		1567	
	8:05:00	0:02:00		1606	
	8:07:00	0:04:00		1660	
	8:11:00	0:08:00		1726	
	8:18:00	0:15:00		1780	
	8:33:00	0:30:00		1828	
	9:03:00	1:00:00		1863	
	10:03:00	2:00:00		1896	
	12:03:00	4:00:00		1921	
	16:03:00	8:00:00		1944	
02/29/00	8:03:00	24:00:00	383.0	1979	17.32
03/01/00	18:10:00		766.1	2496	22.49
03/02/00	7:50:00		383.0	2468	22.21
	14:25:00		191.5	2424	21.77
03/03/00	8:00:00		47.9	2275	20.28



Sample	SB- 3-248
Depth	24.38 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.3	14.1
Water content, %	42.3	32.5
Sample height, mm	25.4	22.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-175

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

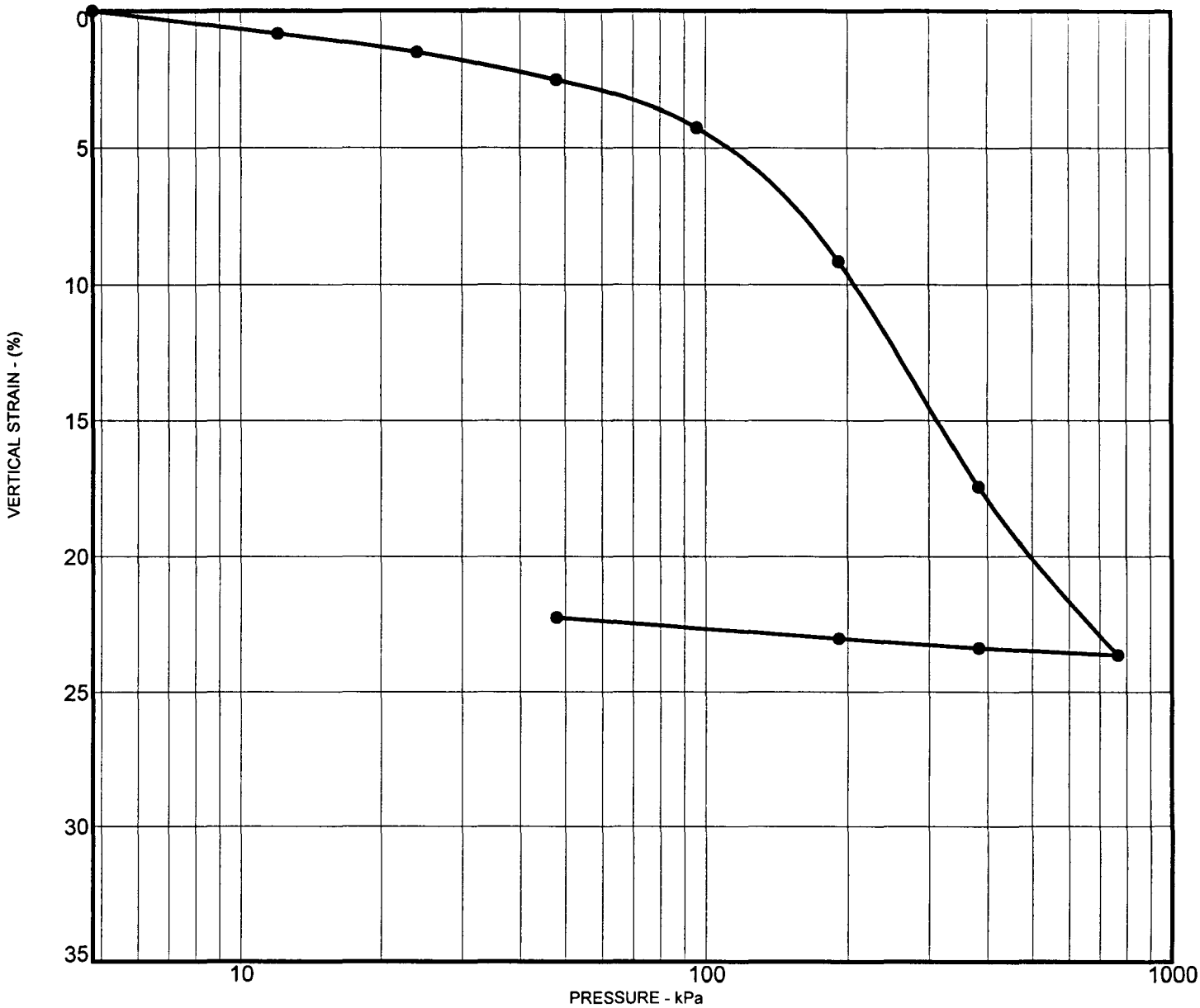
Boring Number:	SB-2-248
Sample Depth:	24.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	177.1	
Ring Weight	45	
Wet Wt.	132.1	
Wet + Tare		176.5
Dry + Tare		146.3
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/29/00	13:15:00			0196	
	15:50:00		4.8	0221	0.25
03/01/00	7:50:00		12.0	0284	0.88
	18:10:00		23.9	0375	1.79
03/02/00	7:50:00		47.9	0529	3.33
03/03/00	8:00:00		95.8	0749	5.53
03/04/00	9:45:00		191.5	1028	8.32
03/05/00	17:45:00		383.0	1374	11.78
03/06/00	19:30:00		766.1	1748	15.52
03/07/00	7:55:00		383.0	1718	15.22
	15:00:00		191.5	1661	14.65
03/08/00	7:30:00		47.9	1485	12.89



Sample	SB- 3-249
Depth	6.10 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	10.1	13.0
Water content, %	62.2	40.6
Sample height, mm	25.4	19.8

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-177

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

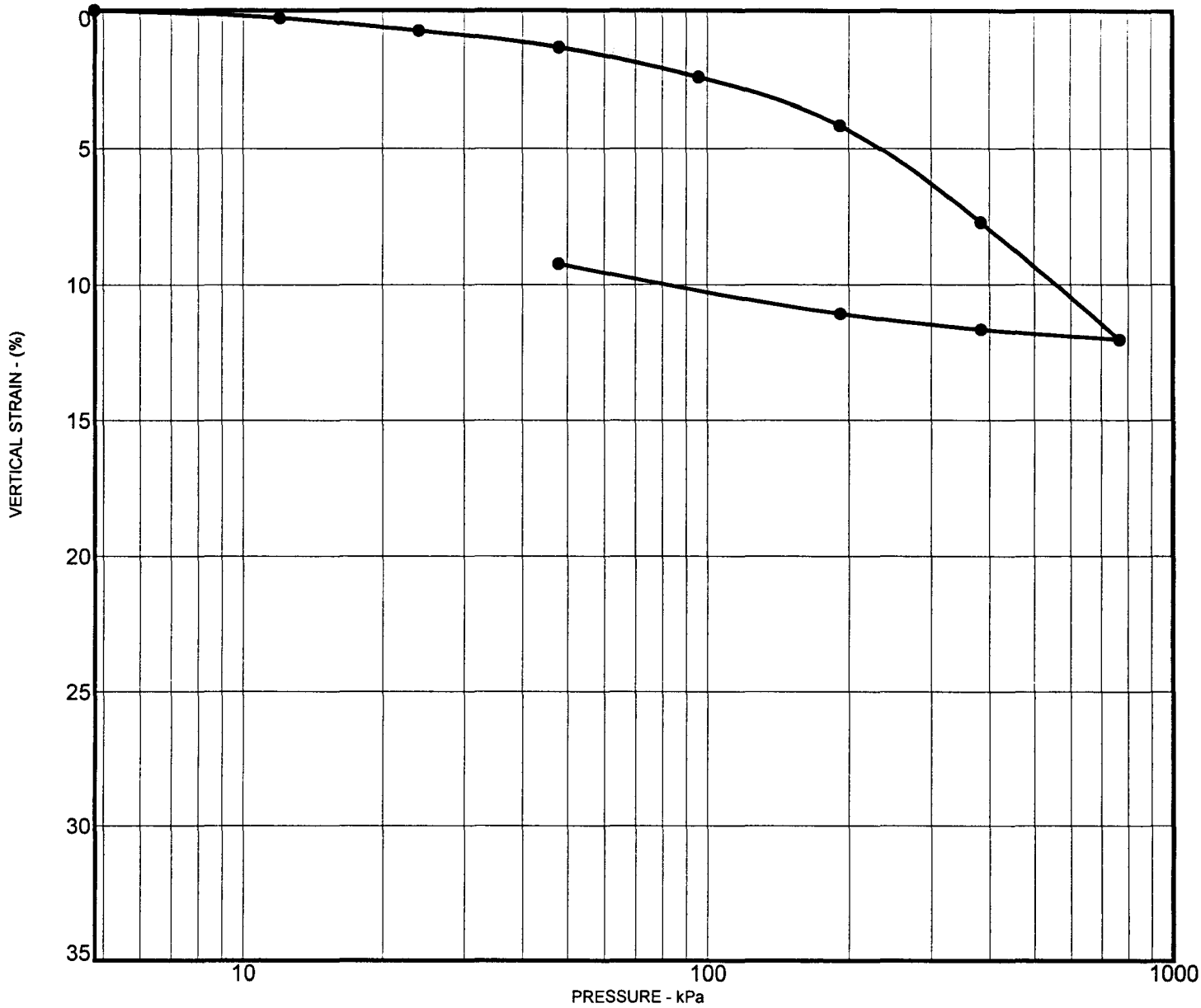
Boring Number:	SB-3-249
Sample Depth:	6.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	169.4	
Ring Weight	45.5	
Wet Wt.	123.9	
Wet + Tare		161.5
Dry + Tare		130.5
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/14/00	16:30:00			0204	
02/15/00	7:50:00		4.8	0319	1.15
	11:00:00		12.0	0404	2.00
	14:55:00		23.9	0474	2.70
	18:20:00		47.9	0574	3.70
02/16/00	8:30:00		95.8	0746	5.42
	19:00:00		191.5	1235	10.31
02/17/00	17:50:00		383.0	2062	18.58
02/19/00	11:00:00		766.1	2683	24.79
	17:30:00		383.0	2657	24.53
02/20/00	8:40:00		191.5	2622	24.18
	17:15:00		47.9	2545	23.41



Sample	SB- 3-249
Depth	15.24 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.5	15.9
Water content, %	31.2	27.0
Sample height, mm	25.4	23.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-179

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

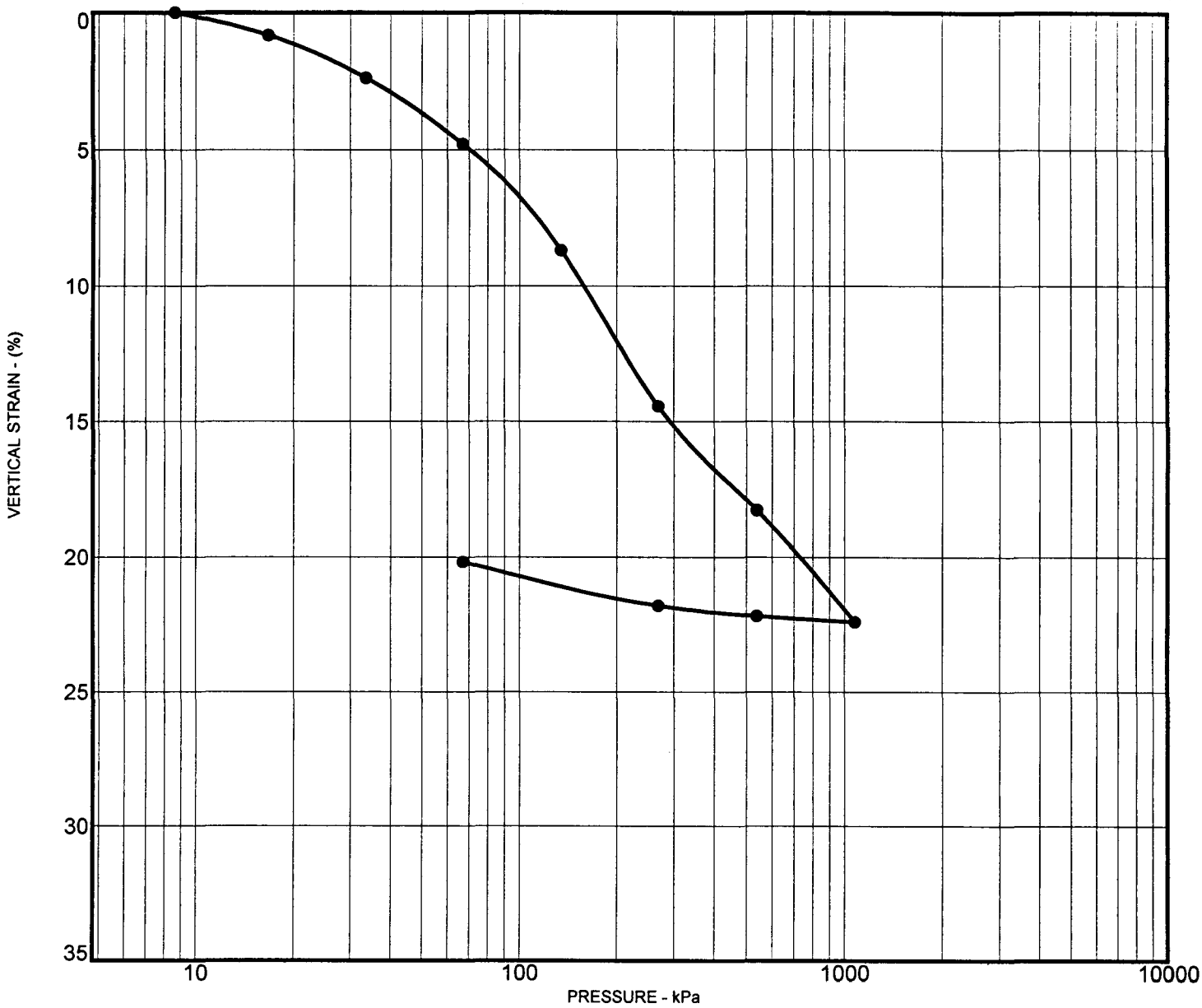
Boring Number:	SB-3-249
Sample Depth:	15.2 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	189.4	
Ring Weight	45.9	
Wet Wt.	143.5	
Wet + Tare		193.1
Dry + Tare		163.6
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/23/00	9:50:00			0215	
	12:00:00		4.8	0208	-0.07
	16:50:00		12.0	0236	0.21
02/24/00	7:30:00		23.9	0283	0.68
	13:40:00		47.9	0343	1.28
02/25/00	7:45:00		95.8	0450	2.35
02/26/00	10:00:00		191.5	0625	4.10
02/27/00	8:30:00		383.0	0977	7.62
02/28/00	7:50:00		766.1	1412	11.97
	11:00:00		383.0	1374	11.59
	16:00:00		191.5	1315	11.00
02/29/00	8:30:00		47.9	1130	9.15



Sample	SB- 3-250
Depth	9.14 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.5	15.6
Water content, %	39.1	23.0
Sample height, mm	25.4	20.3

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-181

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

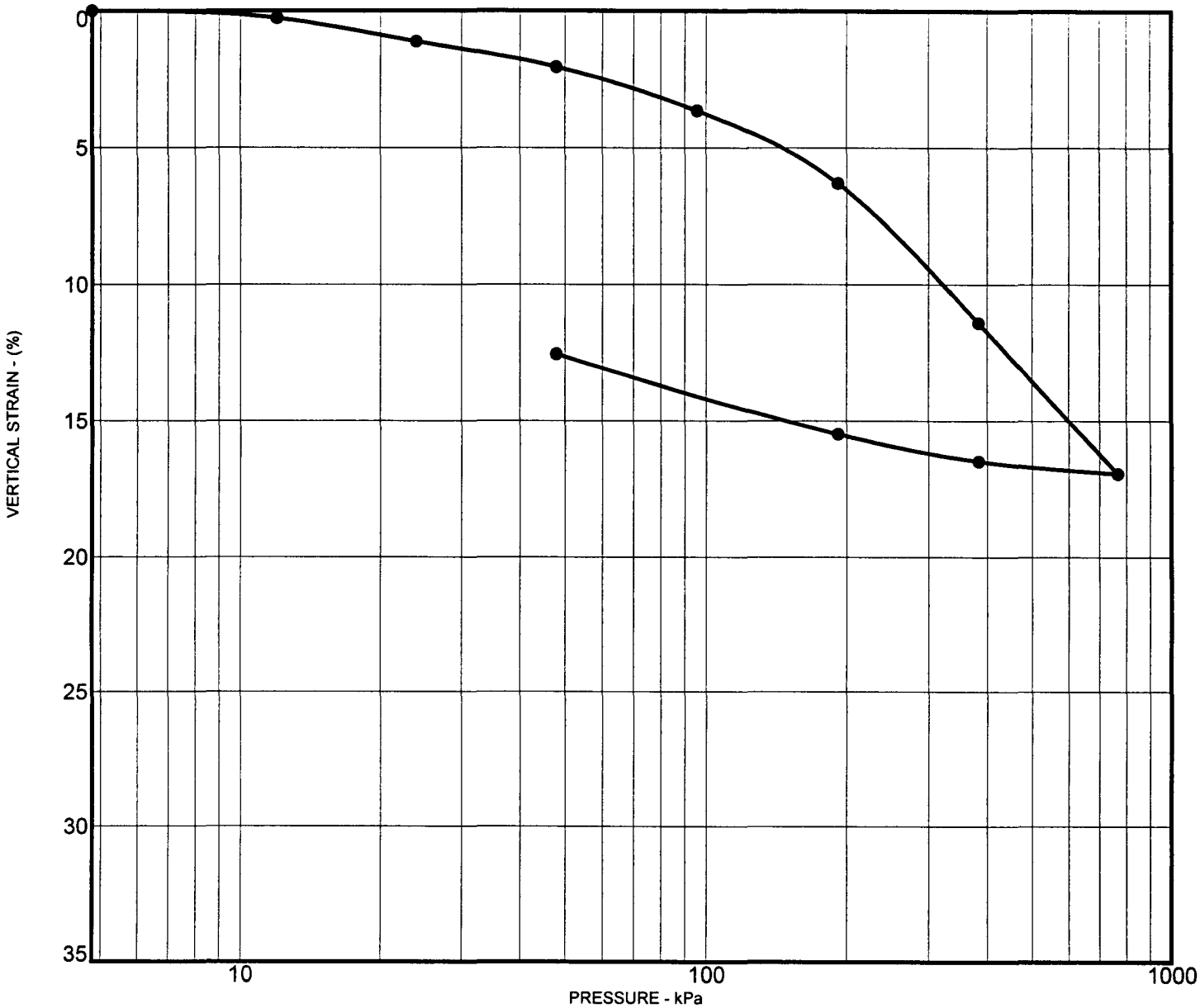
Boring Number:	SB-3-250
Sample Depth:	9.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	176.7	
Ring Weight	45.4	
Wet Wt.	131.3	
Wet + Tare		169.8
Dry + Tare		148.1
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/30/00	17:20:00			0214	
03/31/00	7:00:00		8.6	0344	1.30
	13:00:00		16.8	0427	2.13
	18:20:00		33.5	0584	3.70
04/01/00	10:00:00		67.0	0822	6.08
04/02/00	10:30:00		134.5	1212	9.98
04/03/00	8:50:00		268.6	1787	15.73
04/04/00	6:50:00		537.7	2171	19.57
04/05/00	7:10:00		1075.4	2584	23.70
	11:00:00		537.7	2562	23.48
	14:40:00		268.6	2524	23.10
04/06/00	9:00:00		67.0	2362	21.48



Sample	**SB- 3-250**
Depth	**15.24 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**12.2**	**14.0**
Water content, %	**44.2**	**36.1**
Sample height, mm	**25.4**	**22.1**

KLEINFELDER

PROJECT NO. **35-8163-05**

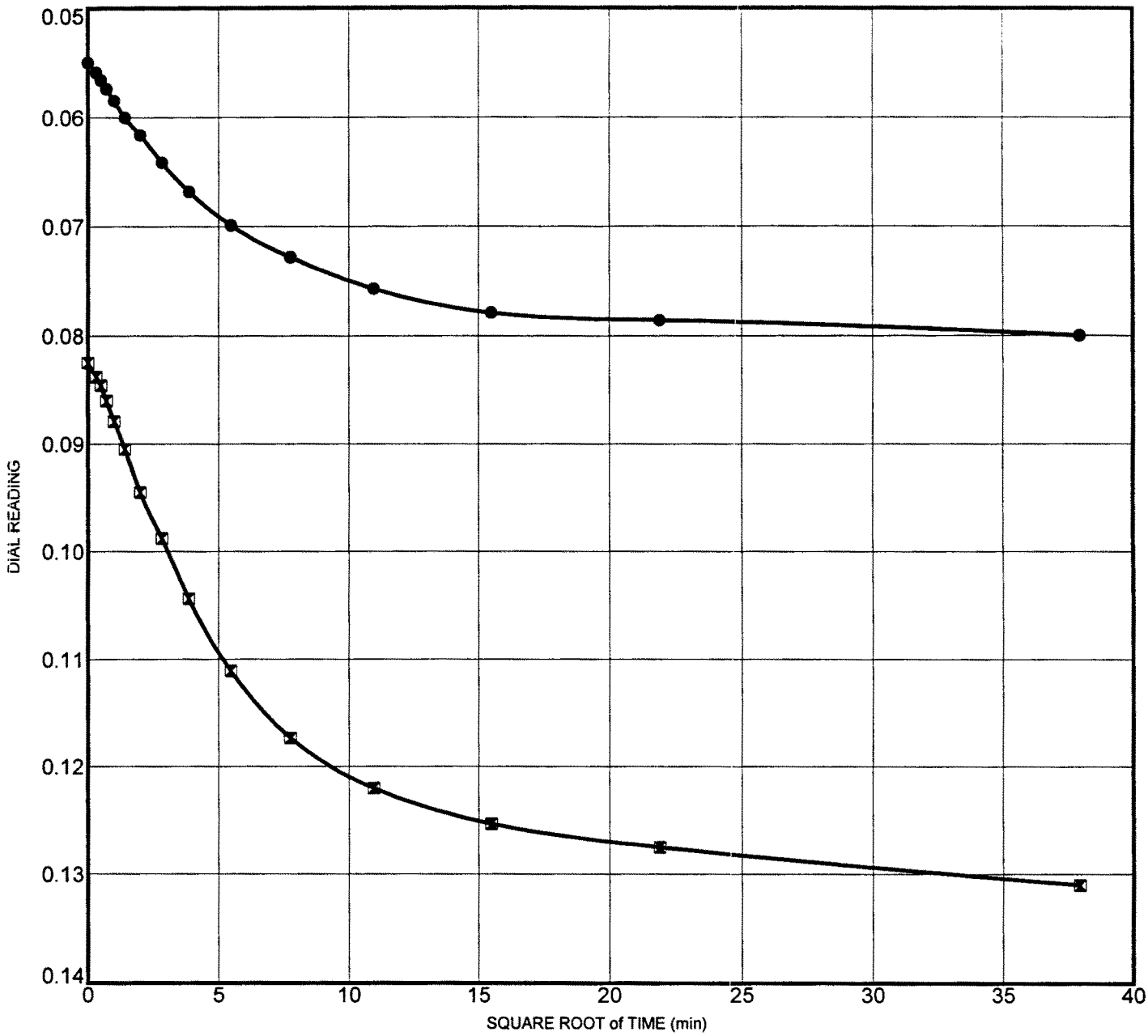
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-183



Sample	**SB- 3-250**	
Depth	**15.2 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-184

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-3-250
Sample Depth:	15.2 m

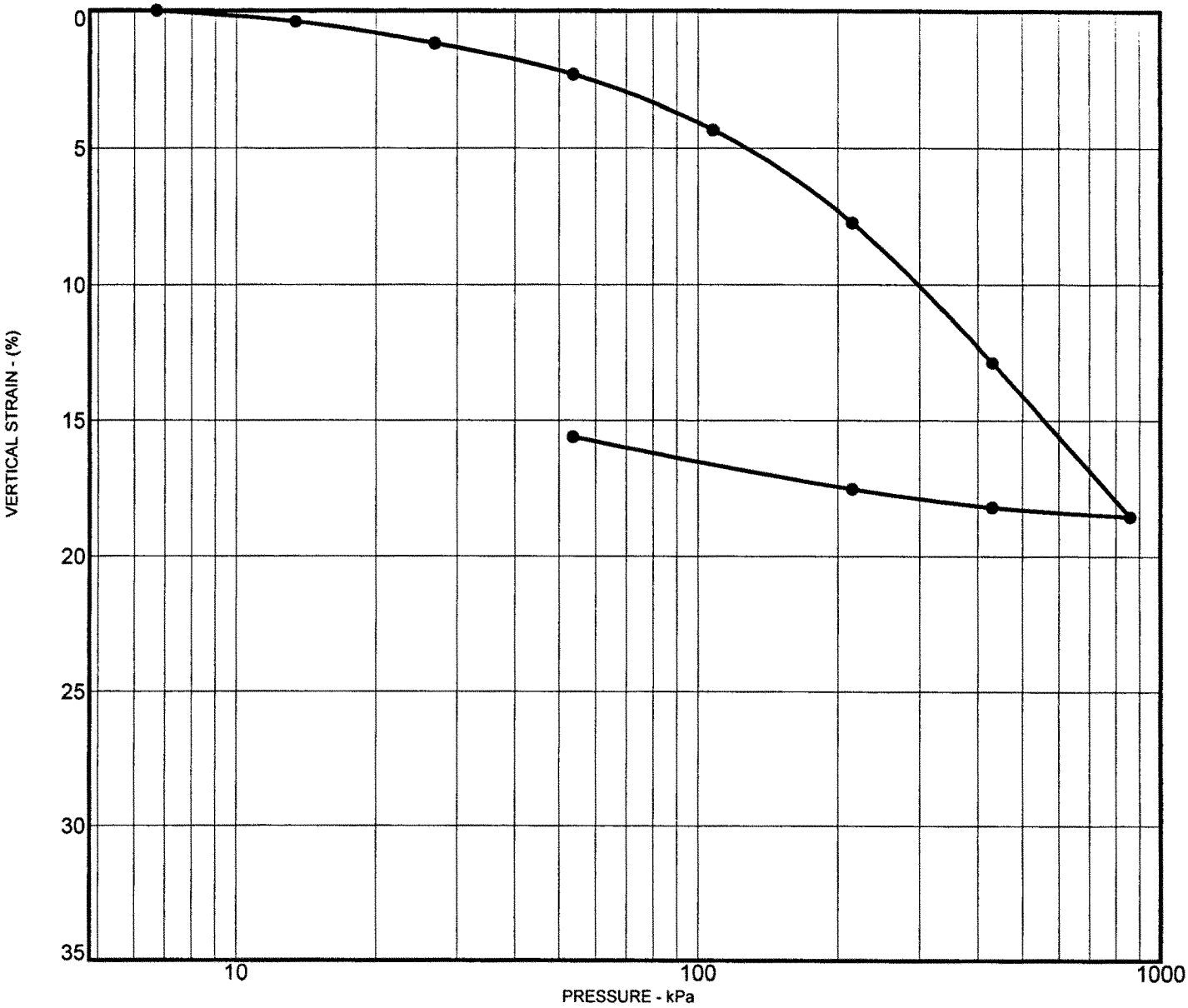
	Before Test (g)	After Test (g)
Wet Wt. + Ring	178.4	
Ring Weight	45.2	
Wet Wt.	133.2	
Wet + Tare		179.4
Dry + Tare		146
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	21.3
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/30/00	15:55:00			0200	
	17:20:00		4.8	0170	-0.30
03/31/00	7:00:00		12.0	0197	-0.03
	16:45:00		23.9	0282	0.82
04/01/00	17:00:00		47.9	0375	1.75
04/04/00	6:50:00		95.8	0535	3.35
	7:06:00	0:00:00	191.5	0550	
	7:06:06	0:00:06		0559	
	7:06:15	0:00:15		0566	
	7:06:30	0:00:30		0574	
	7:07:00	0:01:00		0585	
	7:08:00	0:02:00		0600	
	7:10:00	0:04:00		0616	
	7:14:00	0:08:00		0641	
	7:21:00	0:15:00		0668	
	7:36:00	0:30:00		0699	
	8:06:00	1:00:00		0728	
	9:06:00	2:00:00		0757	
	11:06:00	4:00:00		0779	
	15:06:00	8:00:00		0786	
04/05/00	7:06:00	24:00:00	191.5	0800	6.00
	7:00:00	0:00:00	383.0	0825	6.25
	7:00:06	0:00:06		0838	
	7:00:15	0:00:15		0846	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	7:00:30	0:00:30		0860	
	7:01:00	0:01:00		0879	
	7:02:00	0:02:00		0905	
	7:04:00	0:04:00		0945	
	7:08:00	0:08:00		0988	
	7:15:00	0:15:00		1044	
	7:30:00	0:30:00		1111	
	8:00:00	1:00:00		1173	
	9:00:00	2:00:00		1220	
	11:00:00	4:00:00		1253	
	15:00:00	8:00:00		1275	
04/06/00	7:00:00	24:00:00	383.0	1310	11.10
04/07/00	7:00:00		766.1	1864	16.64
	11:30:00		383.0	1818	16.18
	15:40:00		191.5	1718	15.18
04/08/00	8:00:00		47.9	1426	12.26



Sample	SB- 4-251
Depth	3.05 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.3	14.6
Water content, %	43.0	32.2
Sample height, mm	25.4	21.3

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-187

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

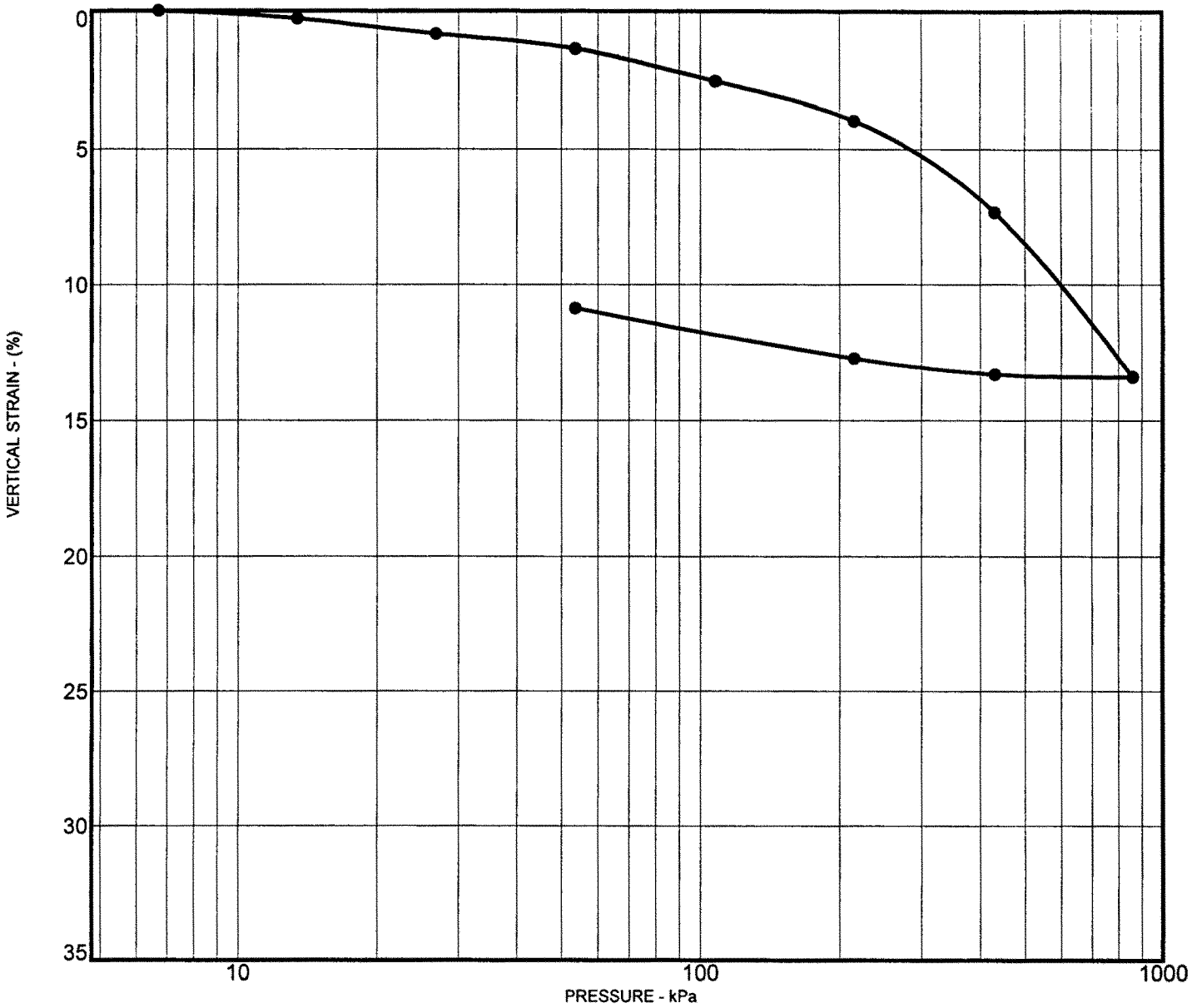
Boring Number:	SB-4-251
Sample Depth:	3.0 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	178.7	
Ring Weight	45.1	
Wet Wt.	133.6	
Wet + Tare		177
Dry + Tare		146.9
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	9:50:00			0200	
	12:30:00		6.7	0202	0.02
	19:00:00		13.4	0242	0.42
02/29/00	8:00:00		26.8	0321	1.21
	15:55:00		53.6	0434	2.34
03/01/00	16:40:00		107.7	0636	4.36
03/02/00	13:15:00		215.0	0974	7.74
03/04/00	9:40:00		430.0	1490	12.90
03/05/00	17:35:00		859.9	2057	18.57
03/06/00	8:15:00		430.0	2022	18.22
	19:30:00		215.0	1955	17.55
03/07/00	7:50:00		53.6	1762	15.62



Sample	SB- 4-251
Depth	25.91 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.1	14.7
Water content, %	38.8	31.7
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-189

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

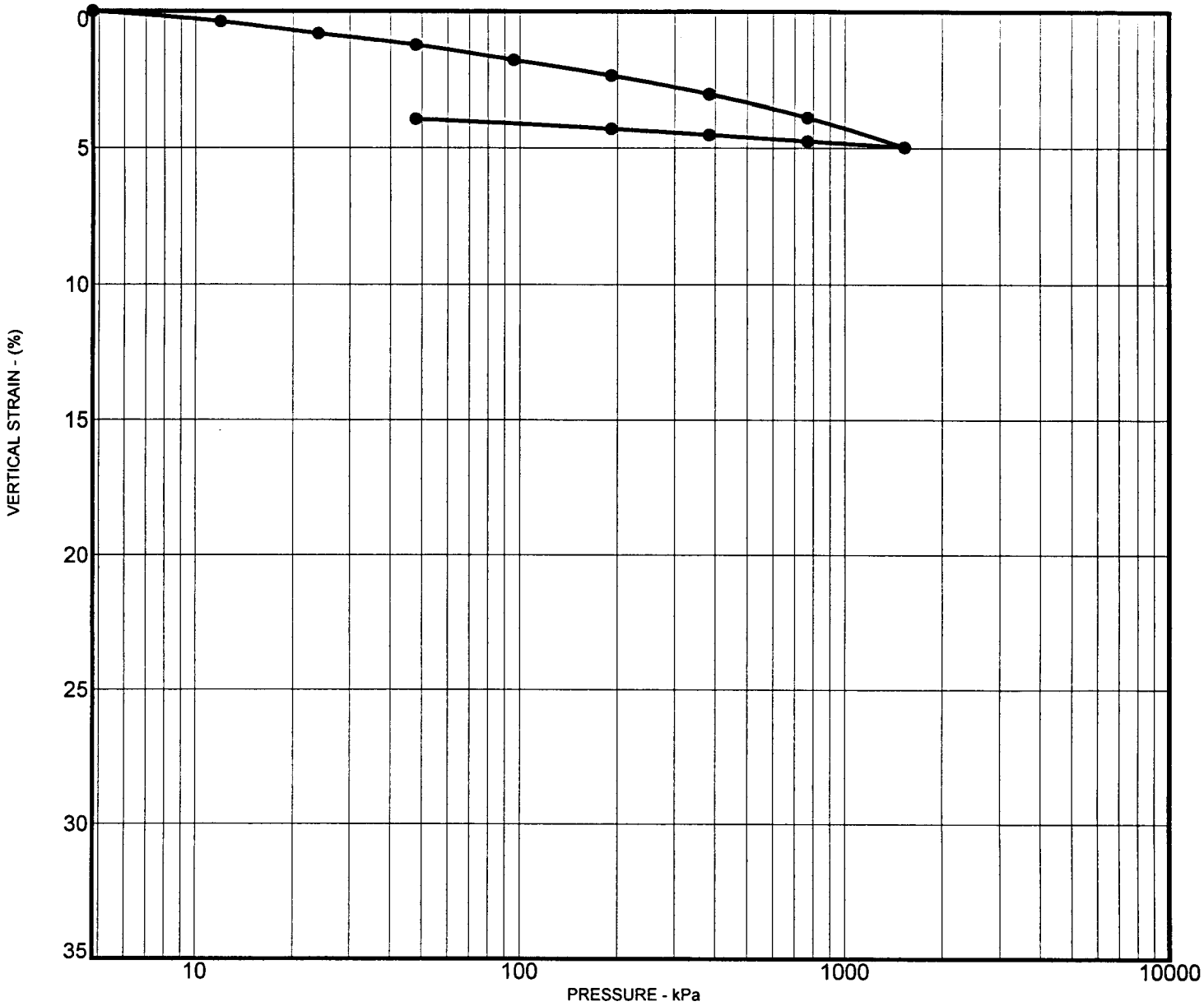
Boring Number:	SB-4-251
Sample Depth:	25.9 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.9	
Ring Weight	45.2	
Wet Wt.	137.7	
Wet + Tare		183.9
Dry + Tare		152.5
Tare Wt.		8.1

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.8
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	10:15:00			0172	
	12:30:00		6.7	0158	-0.14
	19:00:00		13.4	0186	0.14
02/29/00	8:00:00		26.8	0242	0.70
	11:05:00		53.6	0296	1.24
	17:35:00		107.7	0414	2.42
03/01/00	11:30:00		215.0	0556	3.84
03/02/00	13:15:00		430.0	0891	7.19
03/04/00	9:40:00		859.9	1498	13.26
	17:45:00		430.0	1489	13.17
03/05/00	17:35:00		215.0	1430	12.58
03/06/00	8:15:00		53.6	1244	10.72



Sample	SB- 4-251
Depth	32.00 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.8	15.4
Water content, %	26.8	26.4
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

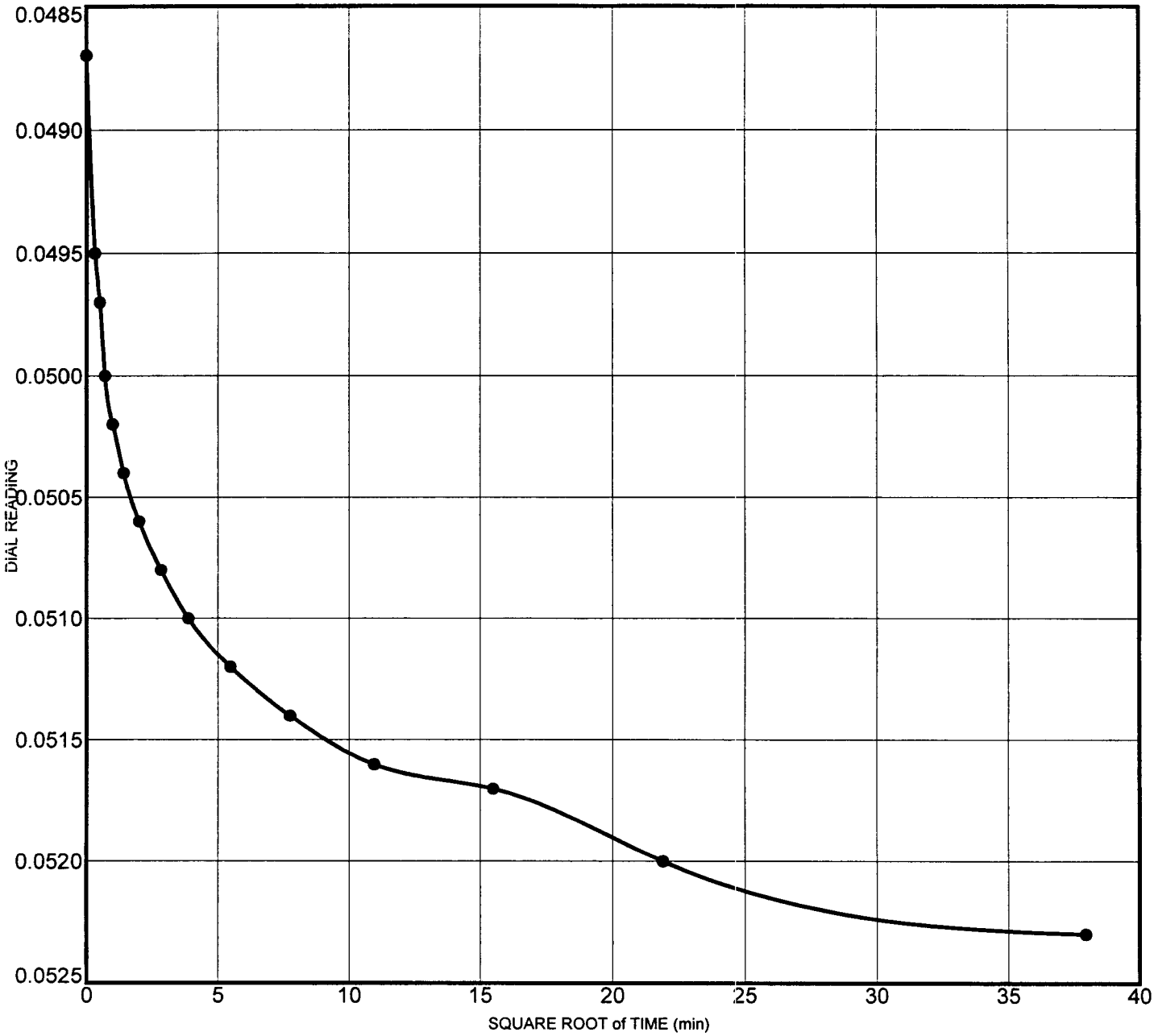
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-191



Sample	**SB- 4-251**	
Depth	**32.0 m**	
Pressure (MPa)	● **0.38**	⊠
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-192

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-4-251
Sample Depth:	32.0 m

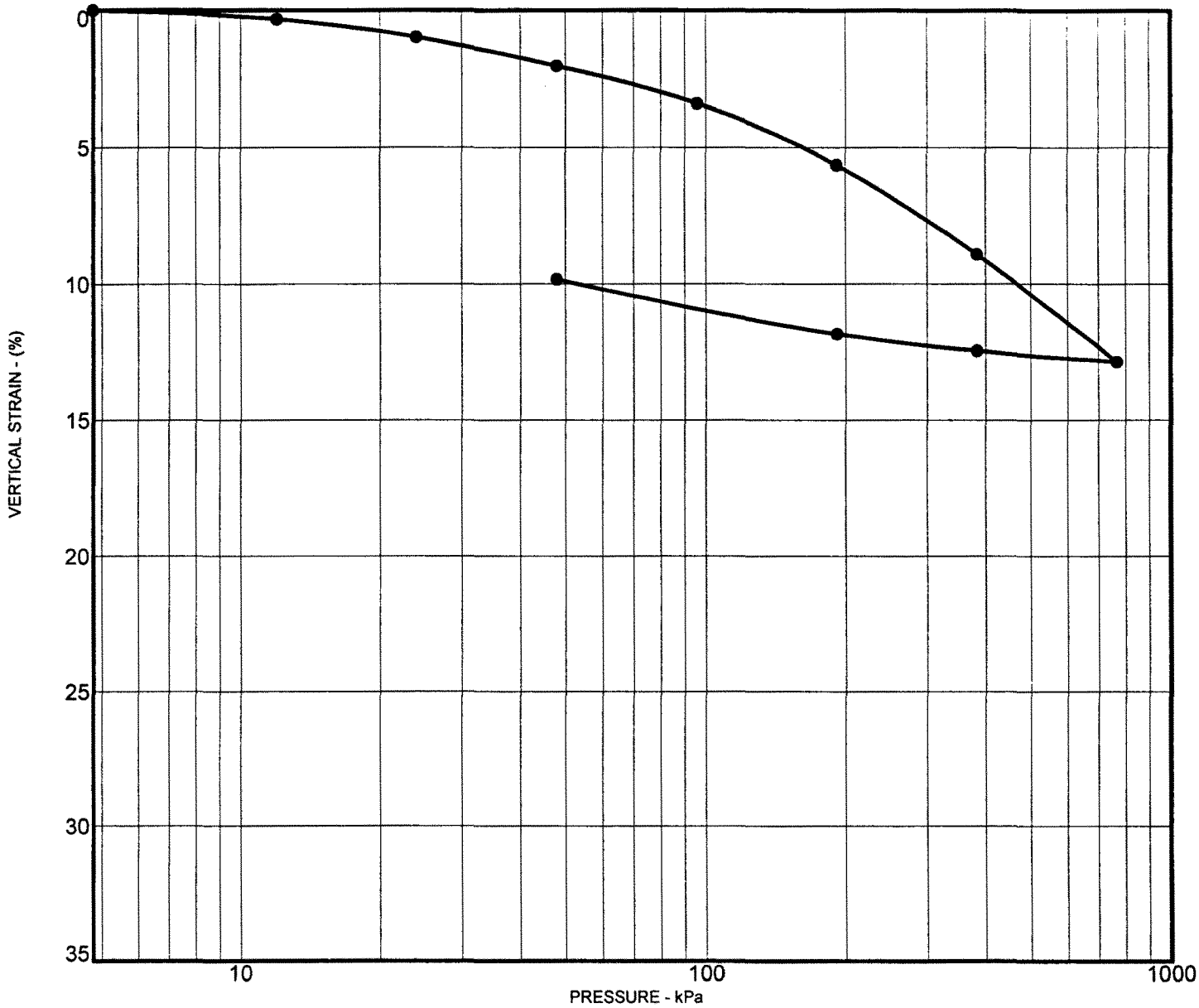
	Before Test (g)	After Test (g)
Wet Wt. + Ring	187.7	
Ring Weight	45.3	
Wet Wt.	142.4	
Wet + Tare		195.7
Dry + Tare		166.1
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	#VALUE!
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	12:00:00			0182	
	15:30:00		4.8	0218	0.36
	19:00:00		12.0	0256	0.74
02/29/00	8:00:00		23.9	0300	1.18
	14:30:00		47.9	0342	1.60
03/01/00	7:50:00		95.8	0398	2.16
	7:45:00		191.5	0455	2.73
	7:45:00	0:00:00	383.0	0487	3.05
	7:45:06	0:00:06		0495	
	7:45:15	0:00:15		0497	
	7:45:30	0:00:30		0500	
	7:46:00	0:01:00		0502	
	7:47:00	0:02:00		0504	
	7:49:00	0:04:00		0506	
	7:53:00	0:08:00		0508	
	8:00:00	0:15:00		0510	
	8:15:00	0:30:00		0512	
	8:45:00	1:00:00		0514	
	9:45:00	2:00:00		0516	
	11:45:00	4:00:00		0517	
	15:45:00	8:00:00		0520	
03/03/00	7:45:00	24:00:00	383.0	0523	3.41
03/04/00	9:40:00		766.1	0607	4.25
03/05/00	17:45:00		1532.2	0715	5.33

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/06/00	8:15:00		766.1	0693	5.11
	19:30:00		383.0	0670	4.88
03/07/00	9:20:00		191.5	0648	4.66
	13:05:00		47.9	0612	4.30



Sample	SB- 4-252
Depth	13.72 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.0	15.5
Water content, %	35.0	28.9
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-195

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

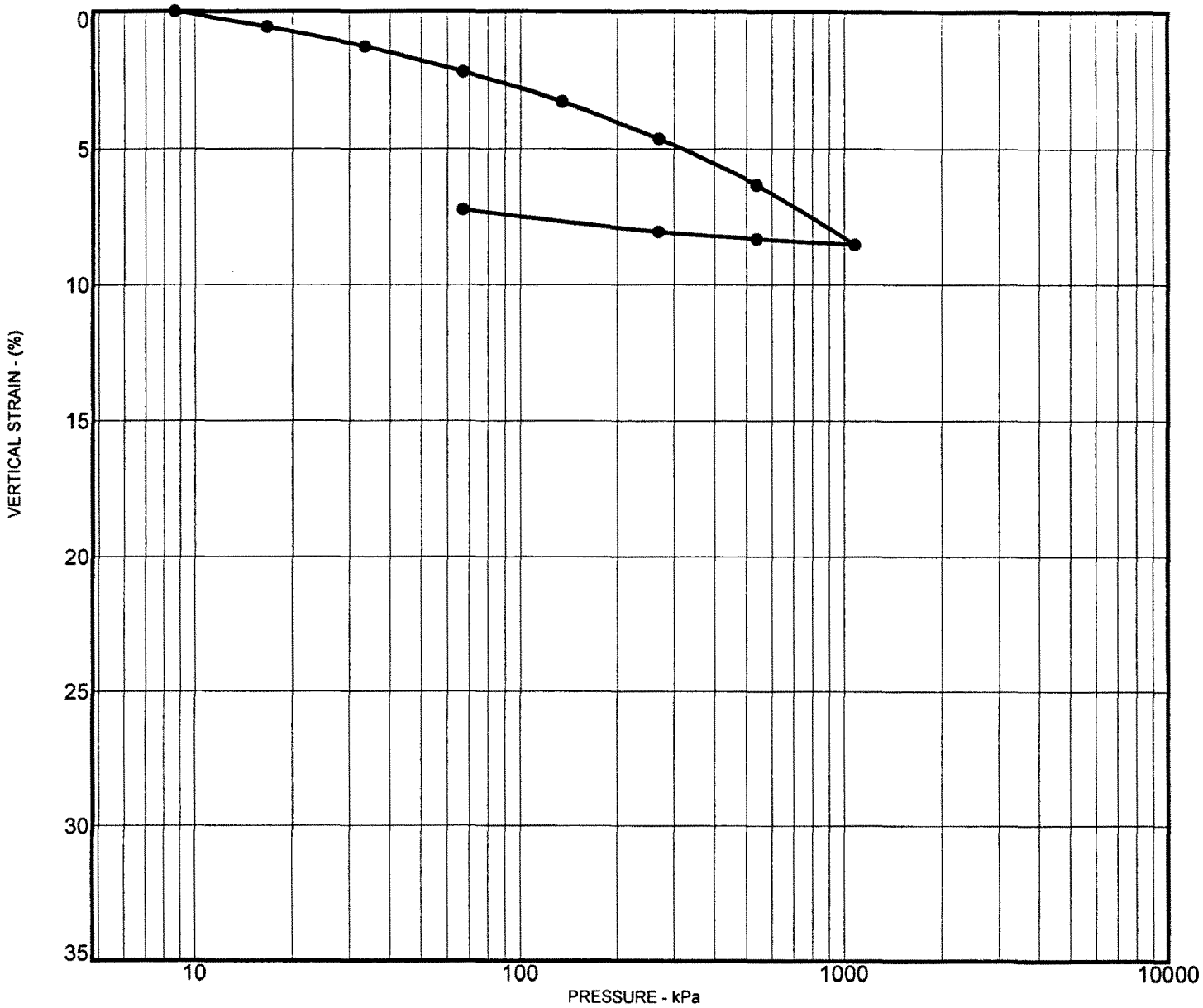
Boring Number:	SB-4-252
Sample Depth:	13.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	188.4	
Ring Weight	45.3	
Wet Wt.	143.1	
Wet + Tare		190.3
Dry + Tare		159.7
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/08/00	8:50:00			0204	
	13:00:00		4.8	0201	-0.03
	19:20:00		12.0	0234	0.30
03/09/00	12:40:00		23.9	0299	0.95
03/10/00	8:00:00		47.9	0404	2.00
	17:00:00		95.8	0541	3.37
03/11/00	18:00:00		191.5	0765	5.61
03/12/00	17:00:00		383.0	1093	8.89
03/13/00	16:00:00		766.1	1486	12.82
03/14/00	7:30:00		383.0	1447	12.43
	12:00:00		191.5	1385	11.81
	18:40:00		47.9	1184	9.80



Sample	SB- 4-252
Depth	24.38 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	16.1	17.4
Water content, %	24.2	21.3
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-197

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

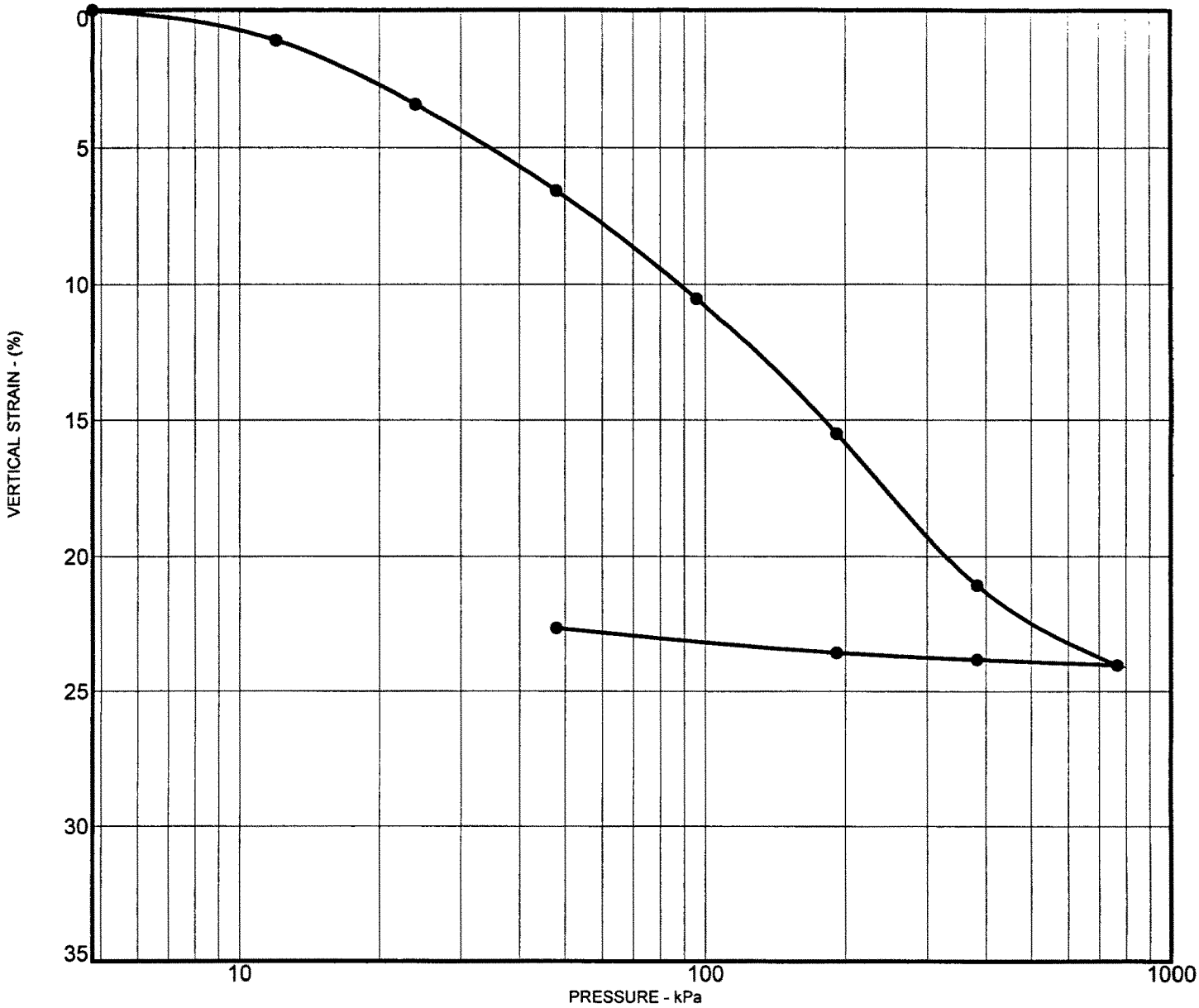
Boring Number:	SB-4-252
Sample Depth:	24.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	196.8	
Ring Weight	45.1	
Wet Wt.	151.7	
Wet + Tare		201.9
Dry + Tare		175.9
Tare Wt.		8.7

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/10/00	17:00:00			0197	
	21:15:00		8.6	0291	0.94
03/11/00	10:00:00		16.8	0348	1.51
	18:00:00		33.5	0420	2.23
03/12/00	8:45:00		67.0	0512	3.15
	17:00:00		134.5	0620	4.23
03/13/00	9:15:00		268.6	0754	5.57
03/14/00	7:30:00		537.7	0923	7.26
03/15/00	7:30:00		1075.4	1144	9.47
	15:00:00		537.7	1123	9.26
	16:50:00		268.6	1096	8.99
03/16/00	7:40:00		67.0	1013	8.16



Sample	SB- 5-293
Depth	1.52 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	9.9	12.7
Water content, %	63.5	40.9
Sample height, mm	25.4	19.6

KLEINFELDER

PROJECT NO. 35-8163-05

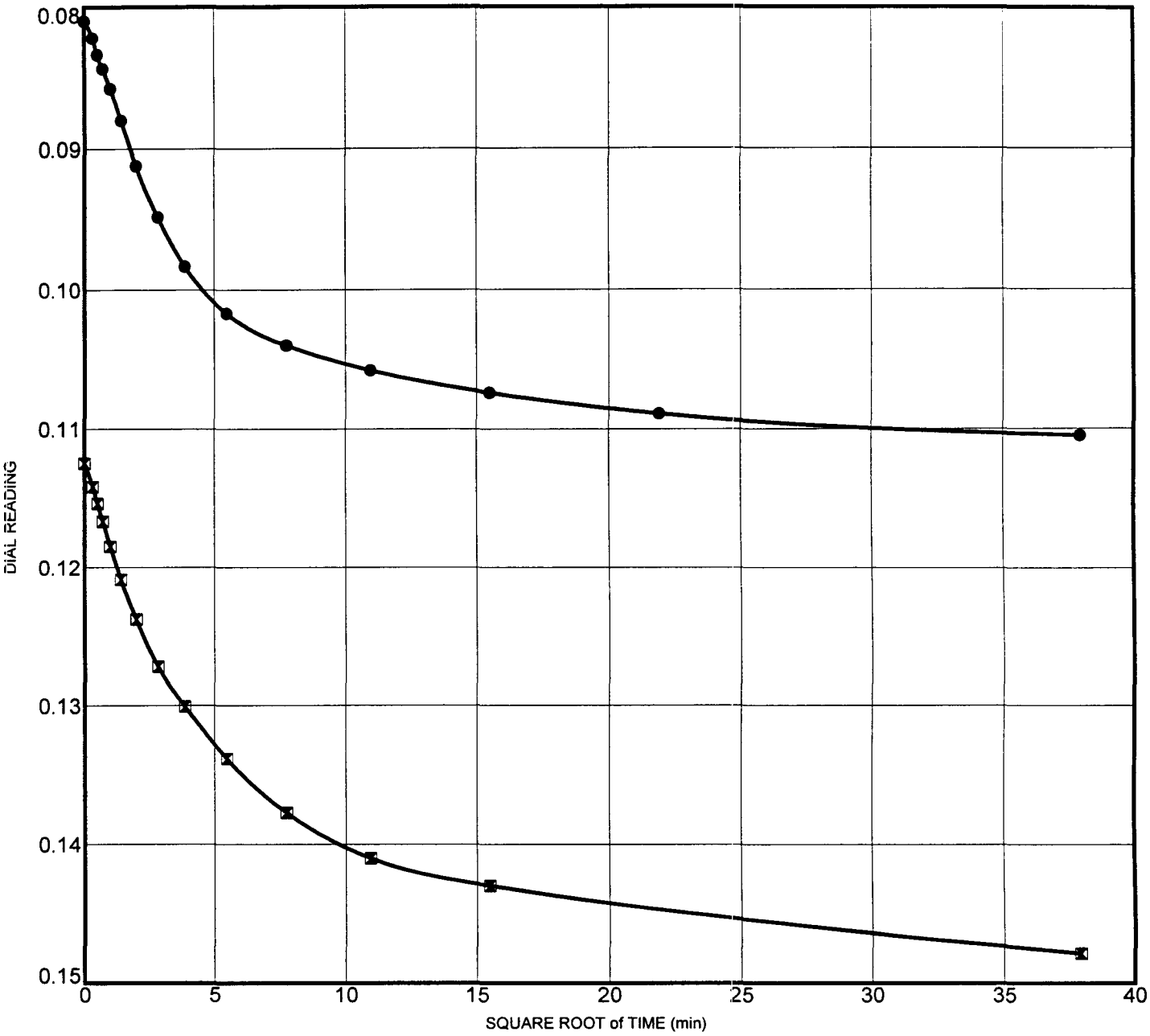
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-199



Sample	**SB- 5-293**	
Depth	**1.5 m**	
Pressure (MPa)	● **0.05**	⊠ **0.10**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-200

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-5-293
Sample Depth:	1.5 m

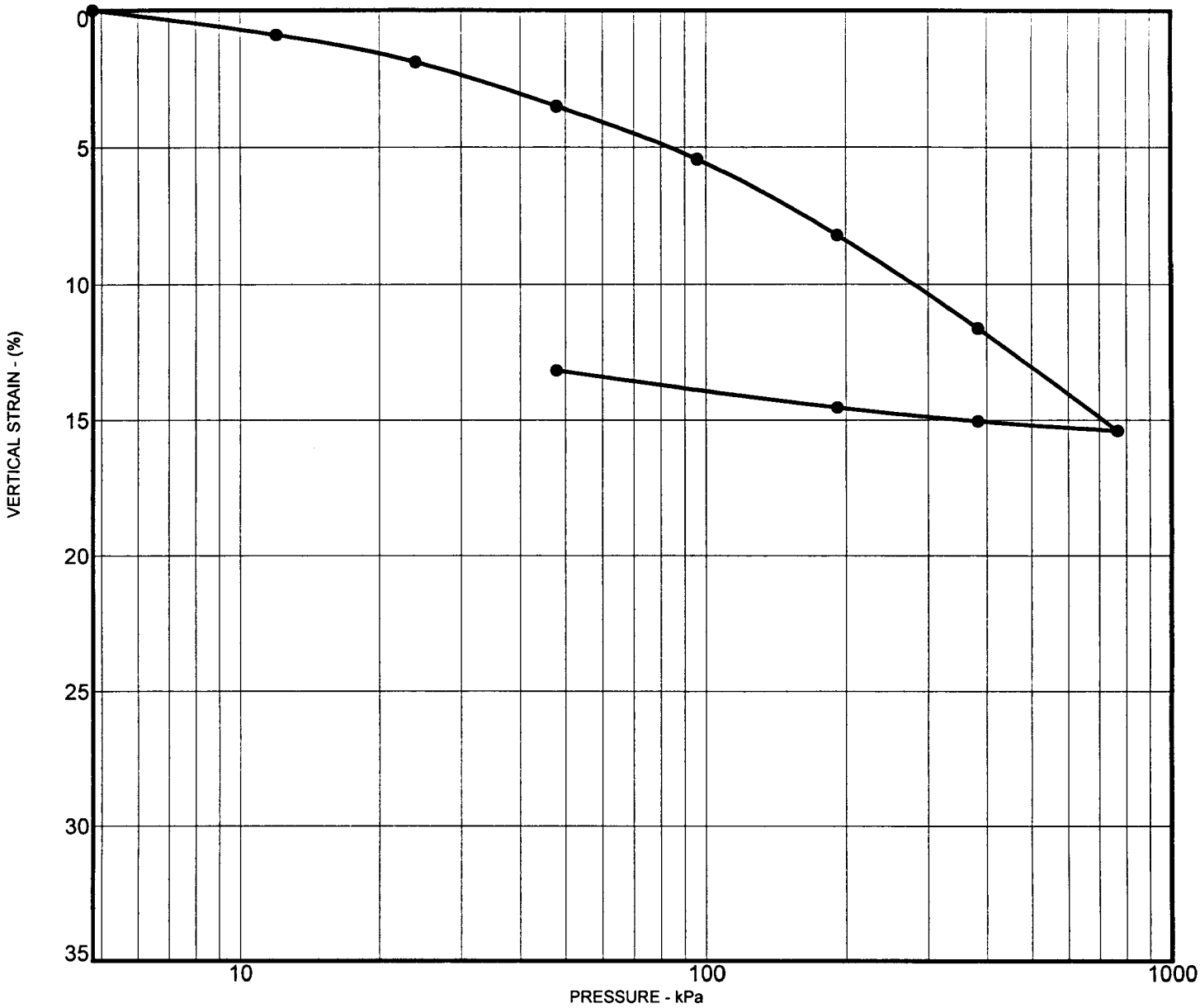
	Before Test (g)	After Test (g)
Wet Wt. + Ring	167.0	
Ring Weight	45	
Wet Wt.	122.0	
Wet + Tare		158.4
Dry + Tare		127.9
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	19.4
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/22/00	11:35:00			0201	
	16:10:00		4.8	0449	2.48
	15:10:00		12.0	0559	3.58
04/24/00	7:47:00		23.9	0792	5.91
	7:57:00	0:00:00	47.9	0810	6.09
	7:57:06	0:00:06		0822	
	7:57:15	0:00:15		0834	
	7:57:30	0:00:30		0844	
	7:58:00	0:01:00		0858	
	7:59:00	0:02:00		0880	
	8:01:00	0:04:00		0912	
	8:05:00	0:08:00		0948	
	8:12:00	0:15:00		0983	
	8:27:00	0:30:00		1017	
	8:57:00	1:00:00		1040	
	9:57:00	2:00:00		1058	
	11:57:00	4:00:00		1074	
	15:57:00	8:00:00		1089	
04/25/00	7:57:00	24:00:00	47.9	1105	9.04
	8:09:00	0:00:00	95.8	1125	9.24
	8:09:06	0:00:06		1142	
	8:09:15	0:00:15		1154	
	8:09:30	0:00:30		1167	
	8:10:00	0:01:00		1185	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	8:11:00	0:02:00		1209	
	8:13:00	0:04:00		1238	
	8:17:00	0:08:00		1272	
	8:24:00	0:15:00		1301	
	8:39:00	0:30:00		1338	
	9:09:00	1:00:00		1377	
	10:09:00	2:00:00		1410	
	12:09:00	4:00:00		1430	
	16:09:00	8:00:00			
04/26/00	8:09:00	24:00:00		1479	
04/27/00	7:00:00	22:51:00	95.8	1502	13.01
04/28/00	8:00:00		191.5	1998	17.97
04/29/00	11:00:00		383.0	2556	23.55
04/30/00	10:15:00		766.1	2852	26.51
	12:00:00		383.0	2831	26.30
	14:00:00		191.5	2806	26.05
05/01/00	7:00:00		47.9	2715	25.14



Sample	SB- 5-293
Depth	9.14 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.0	15.0
Water content, %	39.1	30.4
Sample height, mm	25.4	22.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-203

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

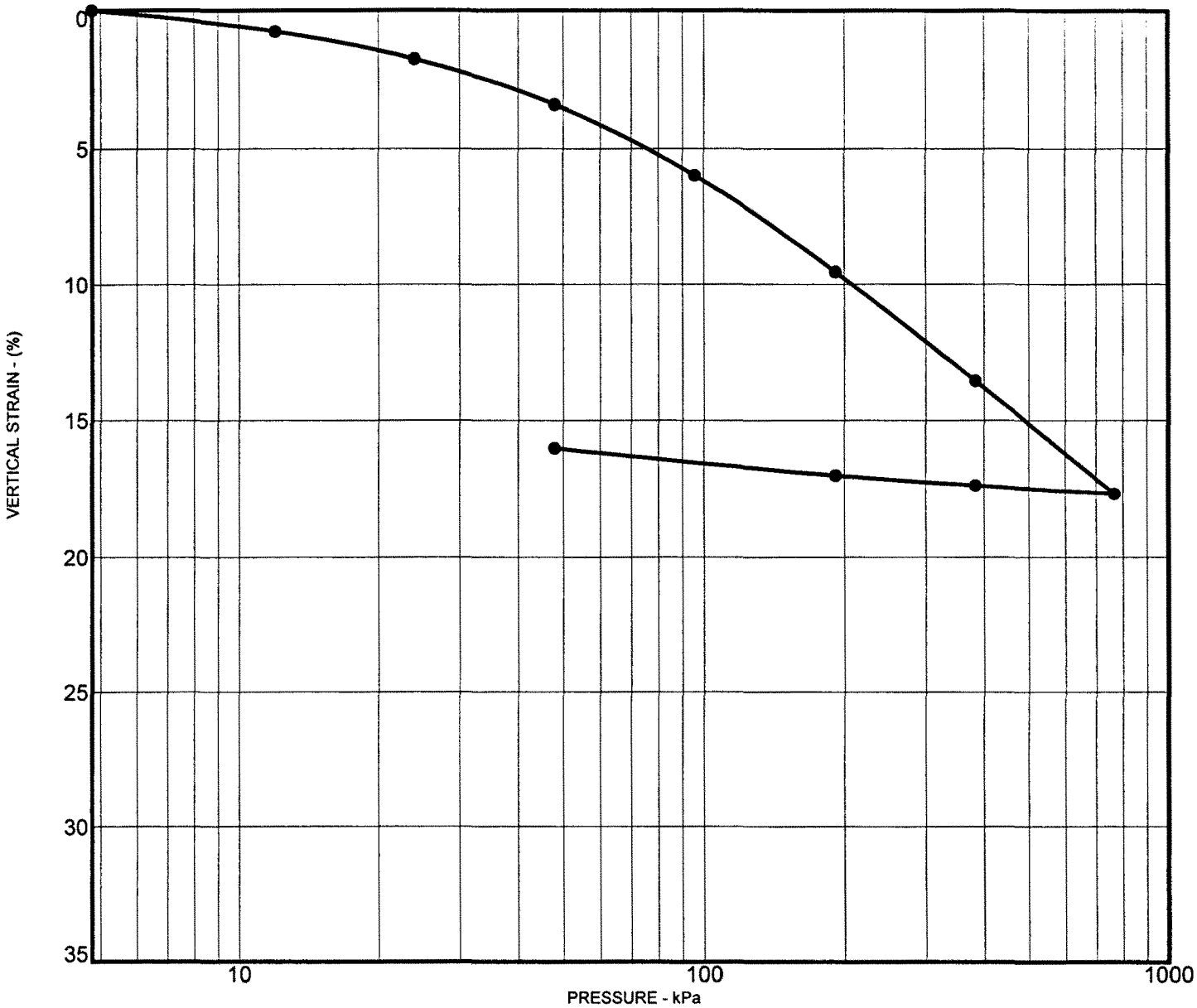
Boring Number:	SB-5-293
Sample Depth:	9.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.3	
Ring Weight	45.4	
Wet Wt.	136.9	
Wet + Tare		182
Dry + Tare		152.1
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	26.0
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/22/00	12:05:00			0224	
	13:00:00		4.8	0247	0.23
04/23/00	9:30:00		12.0	0338	1.14
	17:05:00		23.9	0437	2.13
04/24/00	7:45:00		47.9	0597	3.73
	19:00:00		95.8	0790	5.66
04/25/00	13:30:00		191.5	1068	8.44
04/26/00	11:40:00		383.0	1409	11.85
04/27/00	7:00:00		766.1	1786	15.62
	17:00:00		383.0	1751	15.27
04/28/00	8:00:00		191.5	1701	14.77
	13:30:00		47.9	1564	13.40



Sample	SB- 5-297
Depth	4.57 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	13.0	15.5
Water content, %	39.4	28.0
Sample height, mm	25.4	21.3

KLEINFELDER

PROJECT NO. 35-8163-05

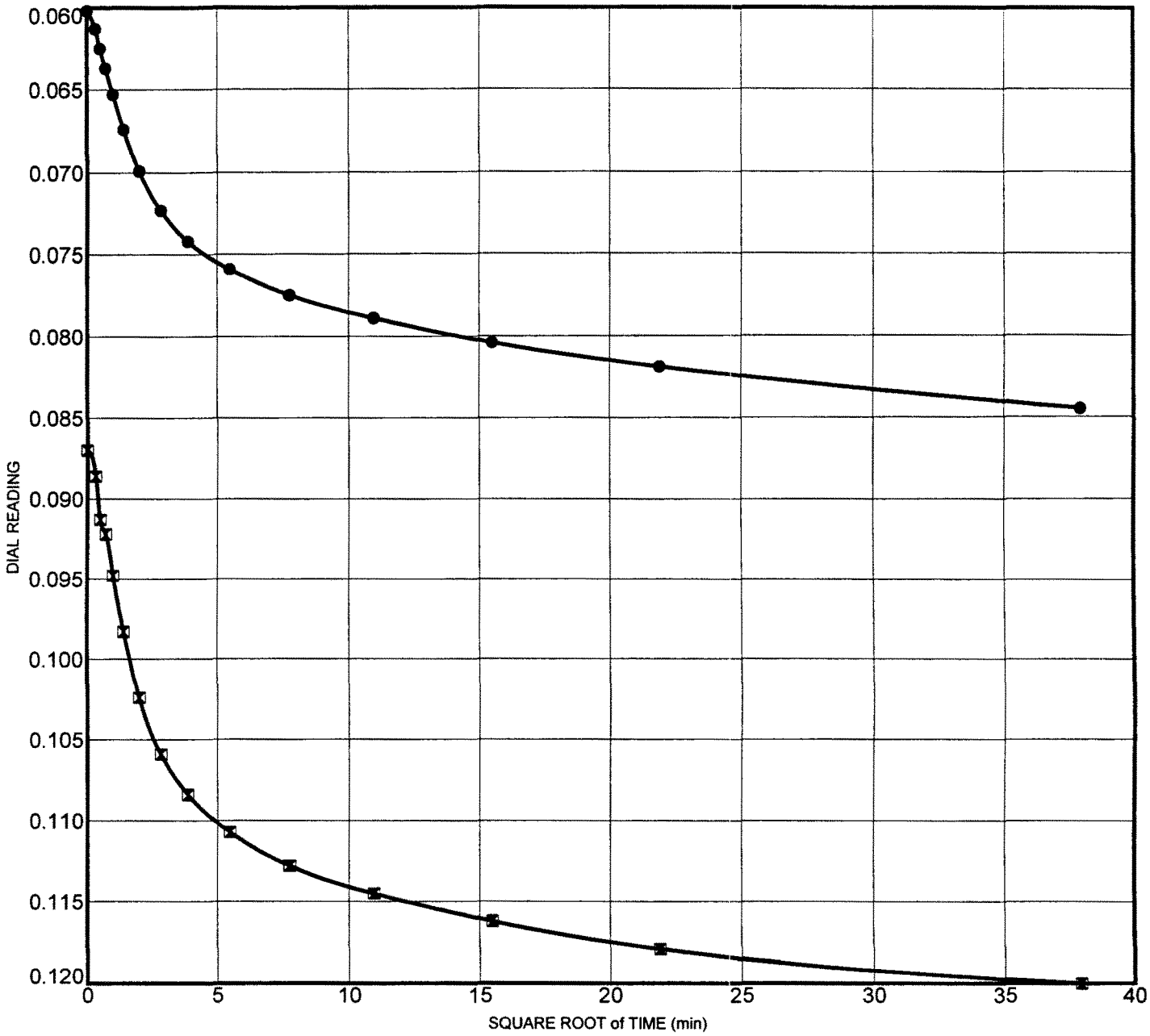
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-205



Sample	**SB- 5-297**	
Depth	**4.6 m**	
Pressure (MPa)	● **0.10**	⊠ **0.19**
Cv (m^2/day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-206

PROJECT NO. **35-8163-05**

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-5-297
Sample Depth:	4.6 m

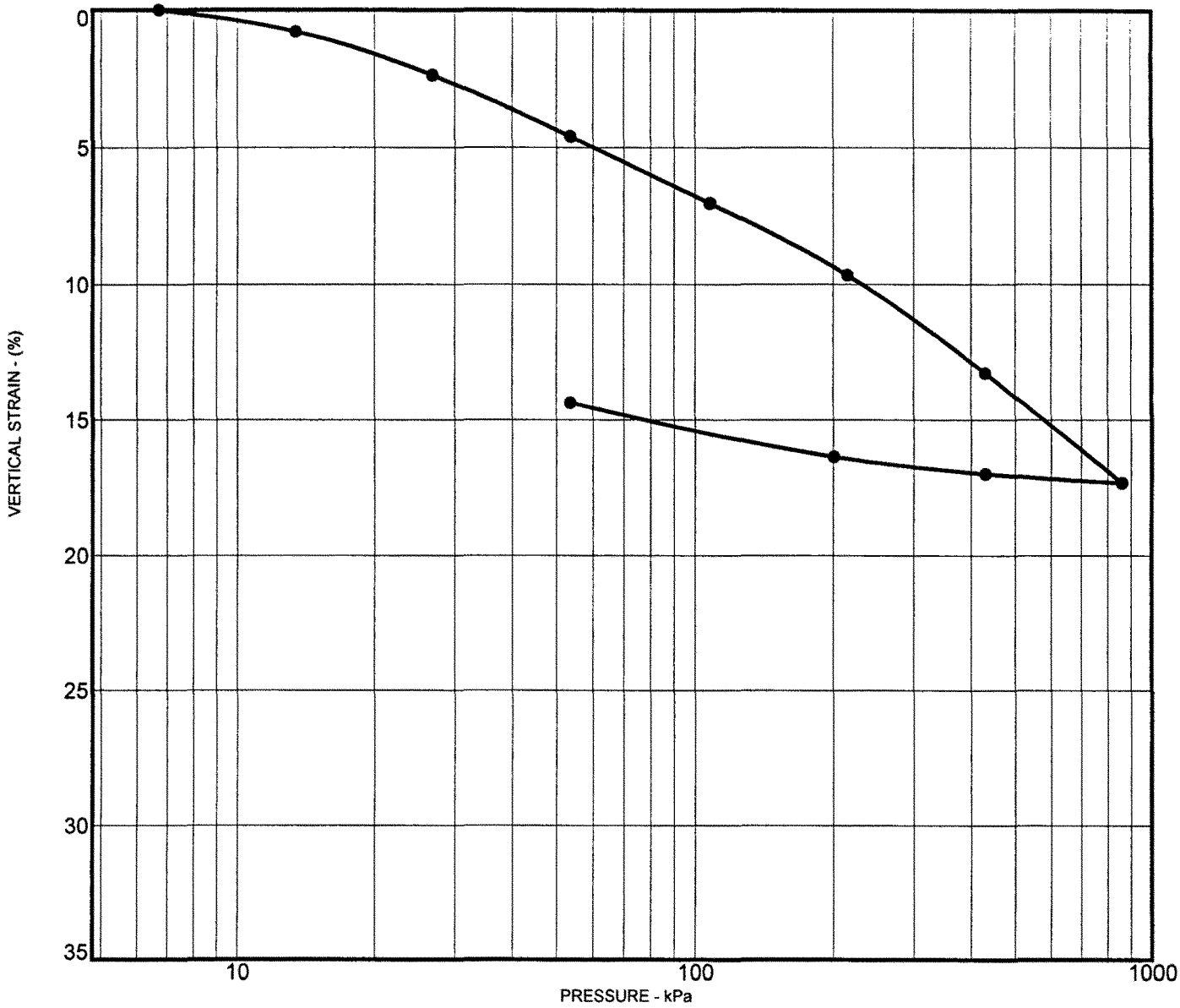
	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.9	
Ring Weight	45.6	
Wet Wt.	137.3	
Wet + Tare		180.1
Dry + Tare		152.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	20.8
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/11/00	17:30:00			0191	
	22:00:00		4.8	0246	0.55
	7:30:00		12.0	0324	1.33
	16:20:00		23.9	0423	2.32
	8:00:00		47.9	0587	3.96
	8:06:00	0:00:00	95.8	0602	4.11
	8:06:06	0:00:06		0613	
	8:06:15	0:00:15		0625	
	8:06:30	0:00:30		0637	
	8:07:00	0:01:00		0653	
	8:08:00	0:02:00		0674	
	8:10:00	0:04:00		0699	
	8:14:00	0:08:00		0723	
	8:21:00	0:15:00		0742	
	8:36:00	0:30:00		0759	
	9:06:00	1:00:00		0775	
	10:06:00	2:00:00		0789	
	12:06:00	4:00:00		0804	
	16:06:00	8:00:00		0819	
04/15/00	8:06:00	24:00:00	95.8	0845	6.54
04/16/00	9:06:00	0:00:00	191.5	0870	6.79
	9:06:06	0:00:06		0886	
	9:06:15	0:00:15		0913	
	9:06:30	0:00:30		0922	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	9:07:00	0:01:00		0948	
	9:08:00	0:02:00		0983	
	9:10:00	0:04:00		1024	
	9:14:00	0:08:00		1059	
	9:21:00	0:15:00		1084	
	9:36:00	0:30:00		1107	
	10:06:00	1:00:00		1128	
	11:06:00	2:00:00		1145	
	13:06:00	4:00:00		1162	
	17:06:00	8:00:00		1179	
04/17/00	9:06:00	24:00:00	191.5	1200	10.09
04/18/00	7:25:00		383.0	1600	14.09
04/19/00	15:45:00		766.1	2014	18.23
04/20/00	16:40:00		383.0	1983	17.92
04/21/00	7:00:00		191.5	1946	17.55
	10:25:00		47.9	1847	16.56



Sample	SB- 5-297
Depth	9.14 m
Classification	CL

	Initial	Final
Dry density, kN/m^3		
Water content, %		
Sample height, mm	25.4	

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-209

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

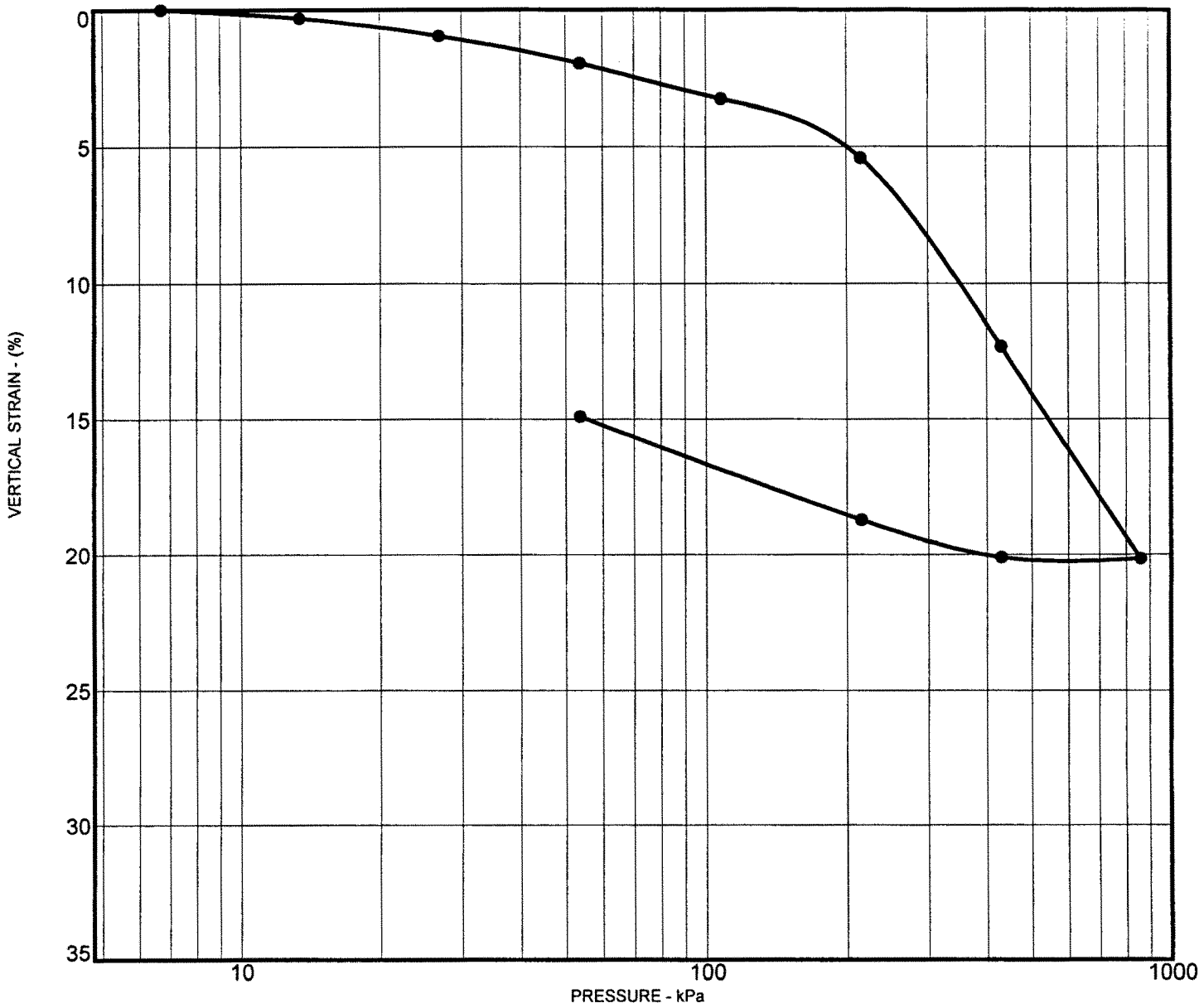
Boring Number:	SB-5-297
Sample Depth:	9.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	0.0	
Ring Weight	45.2	
Wet Wt.	-45.2	
Wet + Tare		186.9
Dry + Tare		158.6
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.8
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/11/00	17:40:00			0167	
	18:30:00		6.7	0167	0.00
04/12/00	7:30:00		13.4	0247	0.80
	16:20:00		26.8	0406	2.39
04/13/00	12:15:00		53.6	0627	4.60
04/14/00	7:44:00		107.7	0871	7.04
	17:00:00		215.0	1133	9.66
04/15/00	18:15:00		430.0	1495	13.28
04/17/00	7:00:00		859.9	1901	17.34
	12:50:00		430.0	1868	17.01
	16:25:00		215.0	1804	16.37
04/18/00	7:20:00		53.6	1604	14.37



Sample	SB- 6-323
Depth	10.67 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	11.1	13.1
Water content, %	51.5	40.2
Sample height, mm	25.4	21.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-211

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

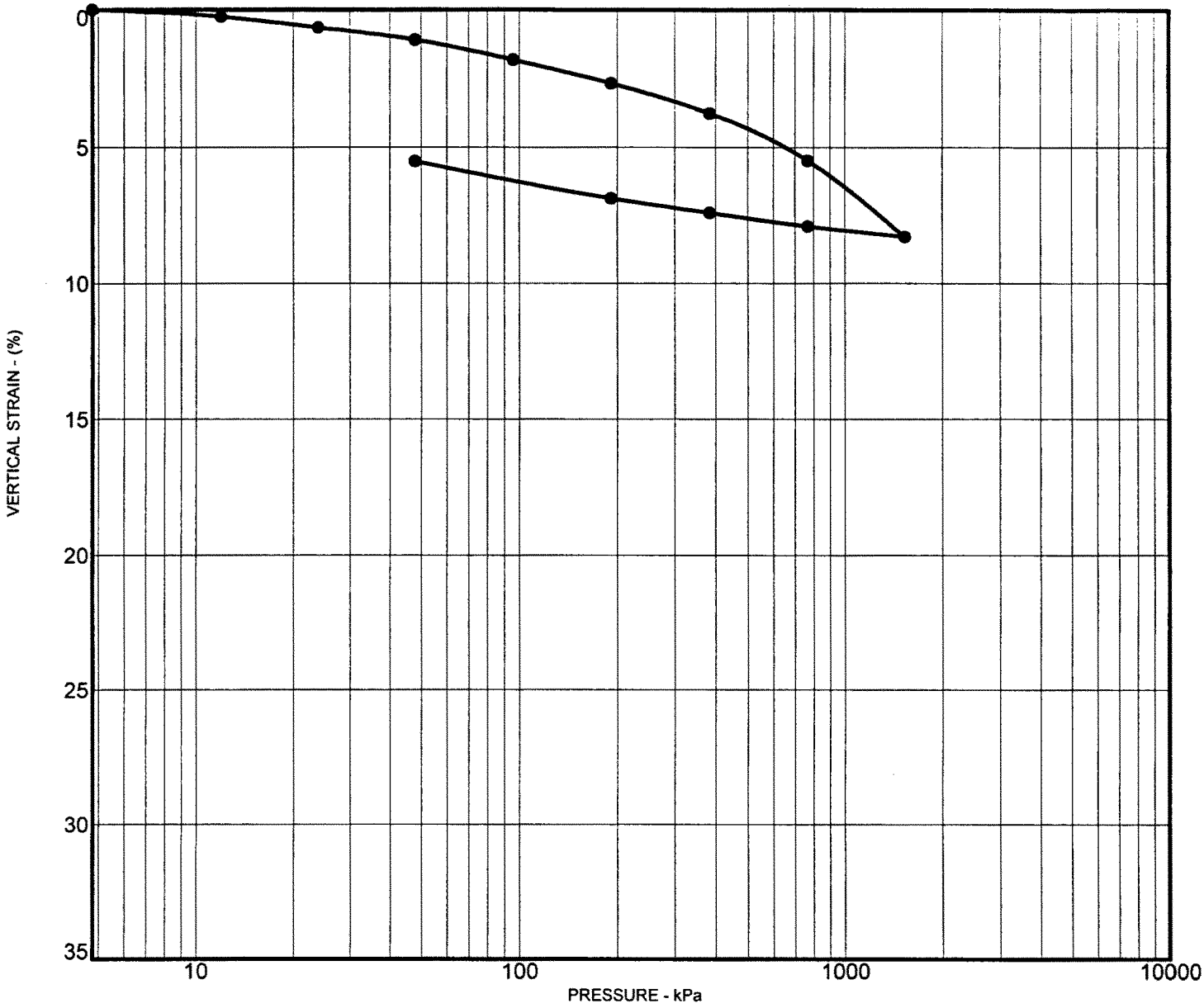
Boring Number:	SB-6-323
Sample Depth:	10.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	172.6	
Ring Weight	45.2	
Wet Wt.	127.4	
Wet + Tare		171.6
Dry + Tare		137.8
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/07/00	11:30:00			0205	
	14:45:00		6.7	0228	0.23
	17:20:00		13.4	0260	0.55
	21:00:00		26.8	0325	1.20
03/08/00	7:20:00		53.6	0426	2.21
	14:35:00		107.7	0555	3.50
03/09/00	17:50:00		215.0	0769	5.64
03/10/00	17:00:00		430.0	1460	12.55
03/11/00	18:00:00		859.9	2243	20.38
03/12/00	8:45:00		430.0	2238	20.33
	17:00:00		215.0	2100	18.95
03/13/00	8:30:00		53.6	1718	15.13



Sample	SB- 6-323
Depth	42.67 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	16.9	17.6
Water content, %	21.0	19.9
Sample height, mm	25.4	23.9

KLEINFELDER

PROJECT NO. 35-8163-05

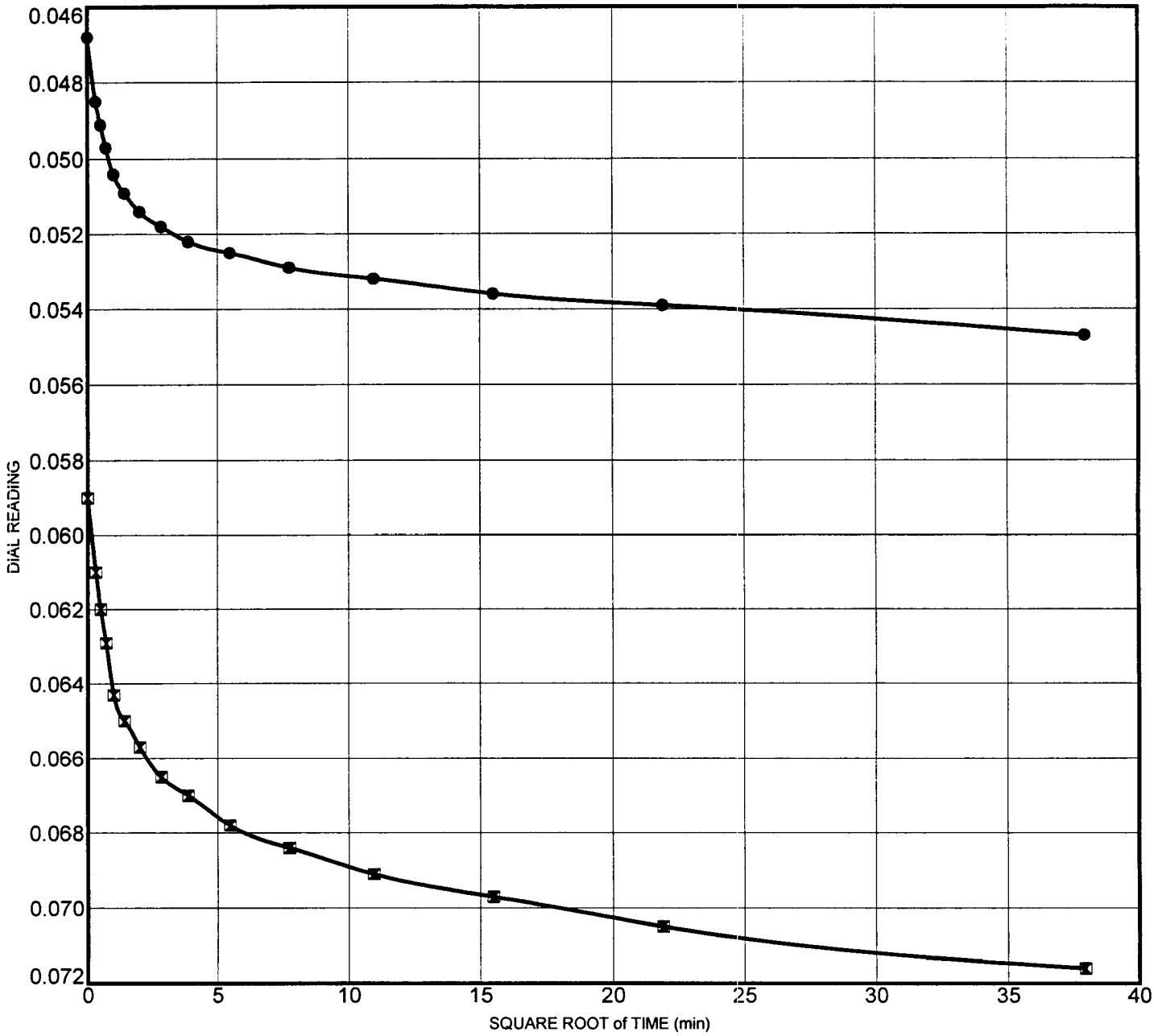
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-213



Sample	**SB- 6-323**	
Depth	**42.7 m**	
Pressure (MPa)	● **0.38**	⊠ **0.77**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-214

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-6-323
Sample Depth:	42.7 m

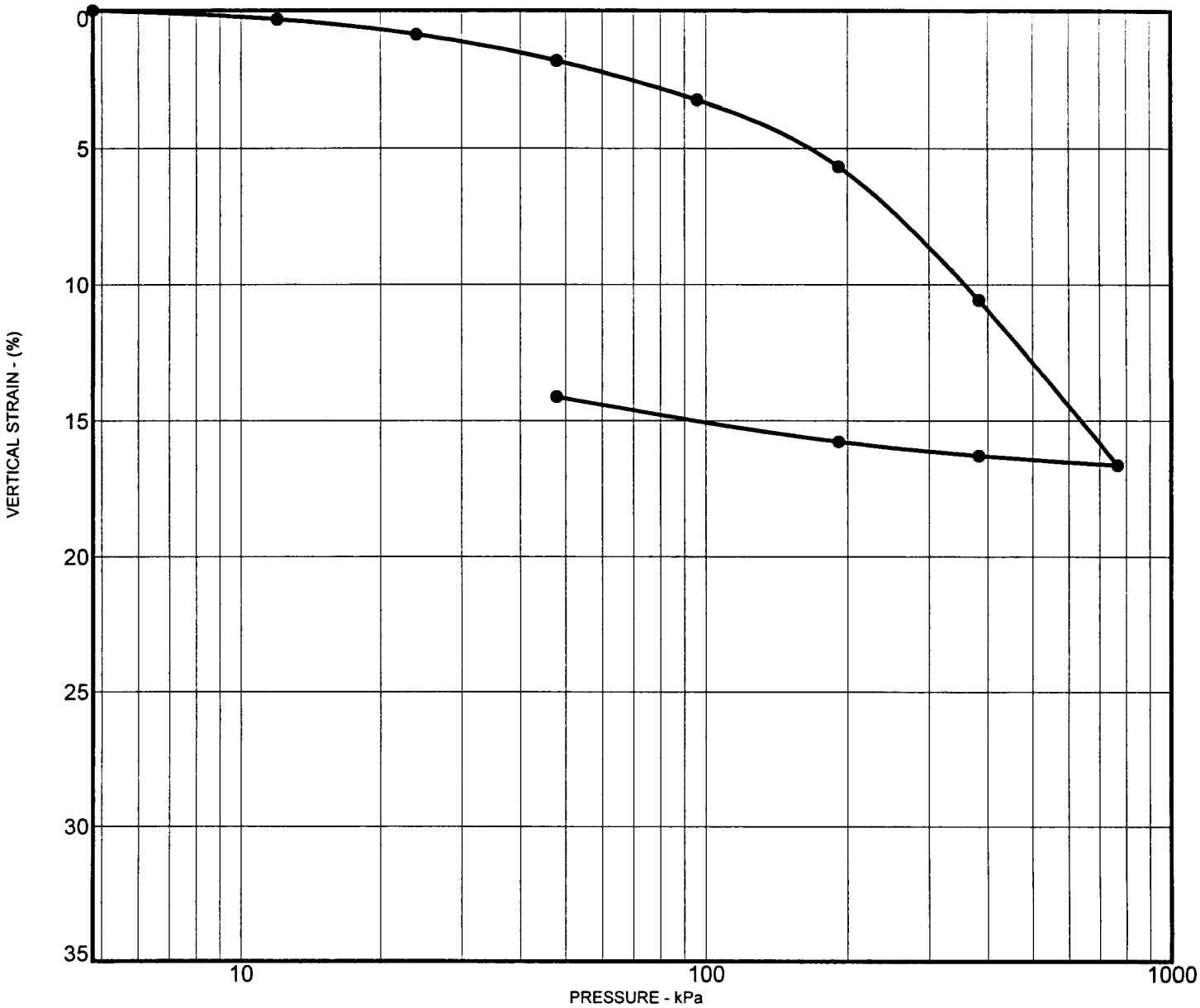
	Before Test (g)	After Test (g)
Wet Wt. + Ring	200.1	
Ring Weight	45.6	
Wet Wt.	154.5	
Wet + Tare		207.1
Dry + Tare		181.7
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	23.3
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/13/00	9:00:00			0185	
	11:40:00		4.8	0169	-0.16
	16:00:00		12.0	0195	0.10
03/14/00	7:30:00		23.9	0235	0.50
	12:00:00		47.9	0280	0.95
	18:40:00		95.8	0352	1.67
	11:30:00		191.5	0438	2.53
	11:30:00	0:00:00	383.0	0468	2.83
	11:30:06	0:00:06		0485	
	11:30:15	0:00:15		0491	
	11:30:30	0:00:30		0497	
	11:31:00	0:01:00		0504	
	11:32:00	0:02:00		0509	
	11:34:00	0:04:00		0514	
	11:38:00	0:08:00		0518	
	11:45:00	0:15:00		0522	
	12:00:00	0:30:00		0525	
	12:30:00	1:00:00		0529	
	13:30:00	2:00:00		0532	
	15:30:00	4:00:00		0536	
	19:30:00	8:00:00		0539	
03/16/00	11:30:00	24:00:00	383.0	0547	3.62
03/17/00	7:58:00	0:00:00	766.1	0590	4.05
	7:58:06	0:00:06		0610	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	7:58:15	0:00:15		0620	
	7:58:30	0:00:30		0629	
	7:59:00	0:01:00		0643	
	8:00:00	0:02:00		0650	
	8:02:00	0:04:00		0657	
	8:06:00	0:08:00		0665	
	8:13:00	0:15:00		0670	
	8:28:00	0:30:00		0678	
	8:58:00	1:00:00		0684	
	9:58:00	2:00:00		0691	
	11:58:00	4:00:00		0697	
	15:58:00	8:00:00		0705	
03/18/00	10:20:00	26:22:00	766.1	0717	5.32
03/19/00	9:30:00		1532.2	0998	8.13
	17:00:00		766.1	0959	7.74
03/20/00	10:00:00		383.0	0909	7.24
	18:00:00		191.5	0856	6.71
03/21/00	19:50:00		47.9	0720	5.35



Sample	SB- 6-327
Depth	3.05 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.3	14.3
Water content, %	44.2	34.6
Sample height, mm	25.4	21.8

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-217

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

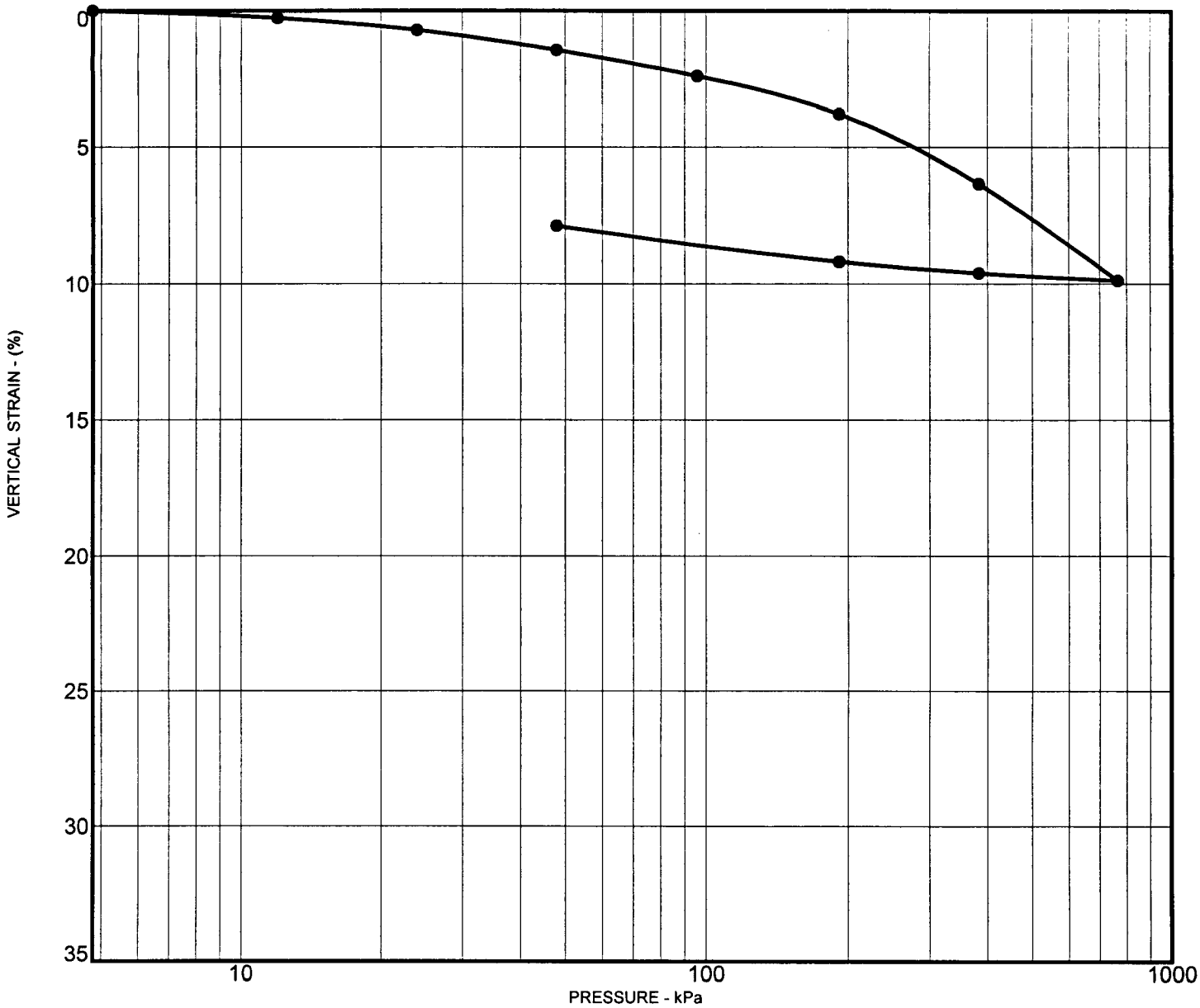
Boring Number:	SB-6-327
Sample Depth:	3.0 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	178.7	
Ring Weight	45	
Wet Wt.	133.7	
Wet + Tare		178.4
Dry + Tare		146.3
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
05/03/00	9:40:00			0184	
	9:50:00		4.8	0174	-0.10
	15:30:00		12.0	0207	0.23
05/04/00	8:00:00		23.9	0262	0.78
05/05/00	8:10:00		47.9	0357	1.73
05/06/00	10:30:00		95.8	0499	3.15
05/07/00	11:30:00		191.5	0741	5.57
05/08/00	9:30:00		383.0	1231	10.47
05/09/00	8:50:00		766.1	1838	16.54
	14:00:00		383.0	1803	16.19
	18:20:00		191.5	1751	15.67
05/10/00	8:00:00		47.9	1585	14.01



Sample	SB- 6-327
Depth	12.19 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.7	15.9
Water content, %	31.6	27.0
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

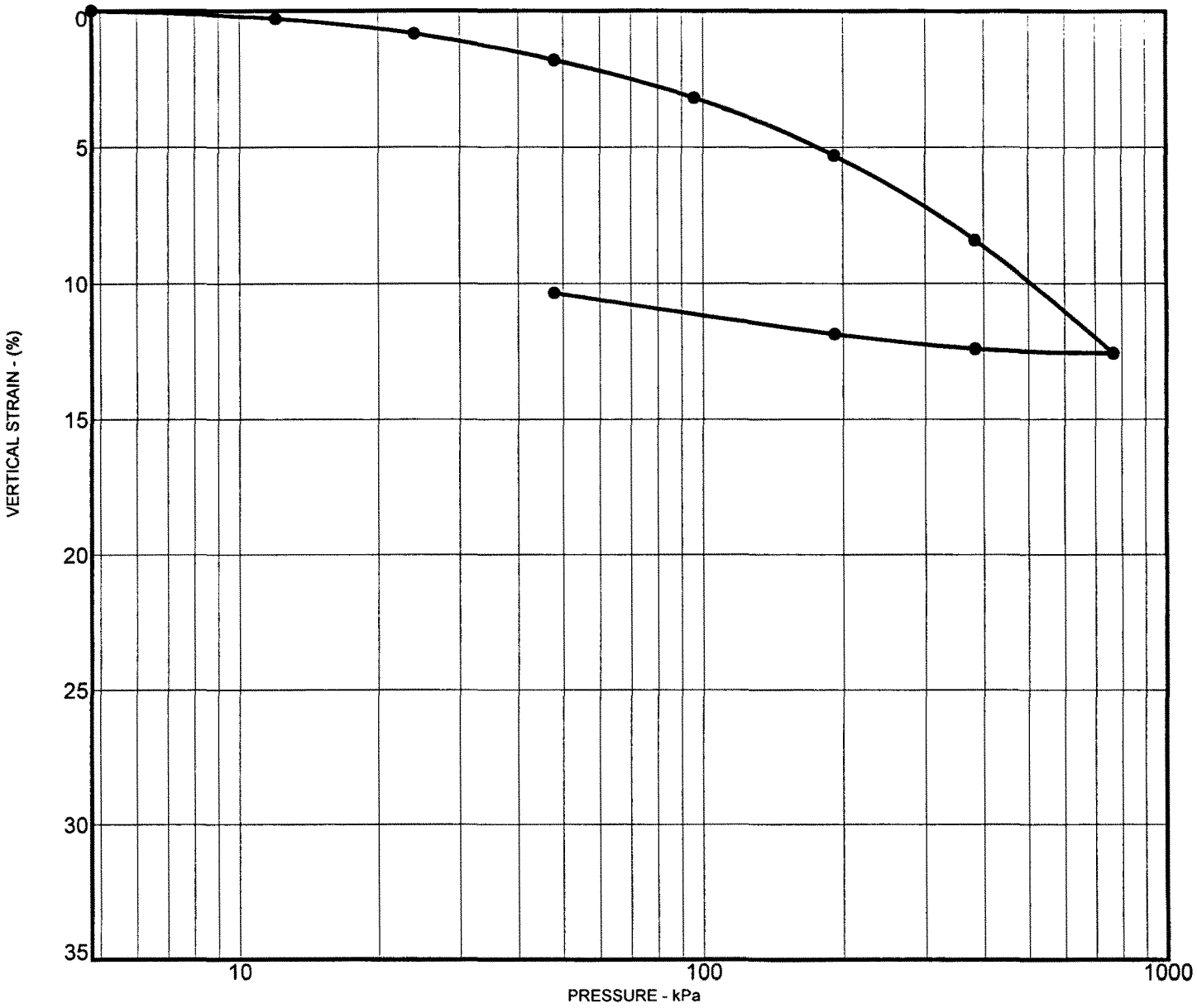
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-219

(This page left blank intentionally.)



Sample	SB- 6-328
Depth	1.52 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.0	14.5
Water content, %	39.9	32.5
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-221

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

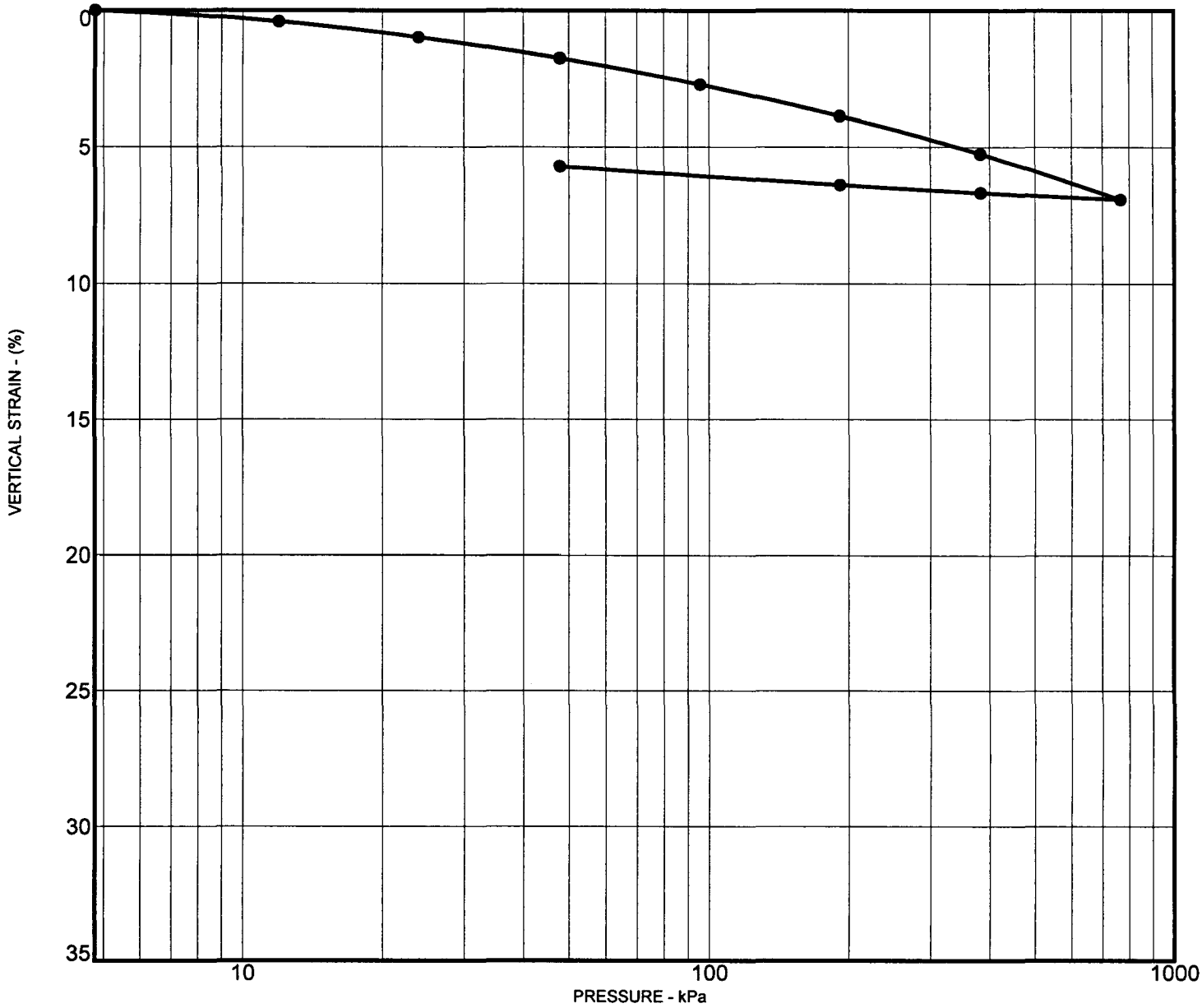
Boring Number:	SB-6-328
Sample Depth:	1.5 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.9	
Ring Weight	45.4	
Wet Wt.	137.5	
Wet + Tare		184.1
Dry + Tare		152.2
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
05/03/00	10:15:00			0207	
	10:50:00		4.8	0195	-0.12
	15:30:00		12.0	0226	0.19
05/04/00	8:00:00		23.9	0282	0.75
05/05/00	8:10:00		47.9	0379	1.72
05/06/00	10:30:00		95.8	0517	3.10
05/07/00	11:30:00		191.5	0725	5.18
05/08/00	8:10:00		383.0	1036	8.29
05/09/00	11:00:00		766.1	1452	12.45
	16:00:00		383.0	1436	12.29
05/10/00	5:50:00		191.5	1381	11.74
05/11/00	8:10:00		47.9	1230	10.23



Sample	**SB- 6-328**
Depth	**16.76 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**16.0**	**16.9**
Water content, %	**24.8**	**22.5**
Sample height, mm	**25.4**	**23.9**

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-223

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

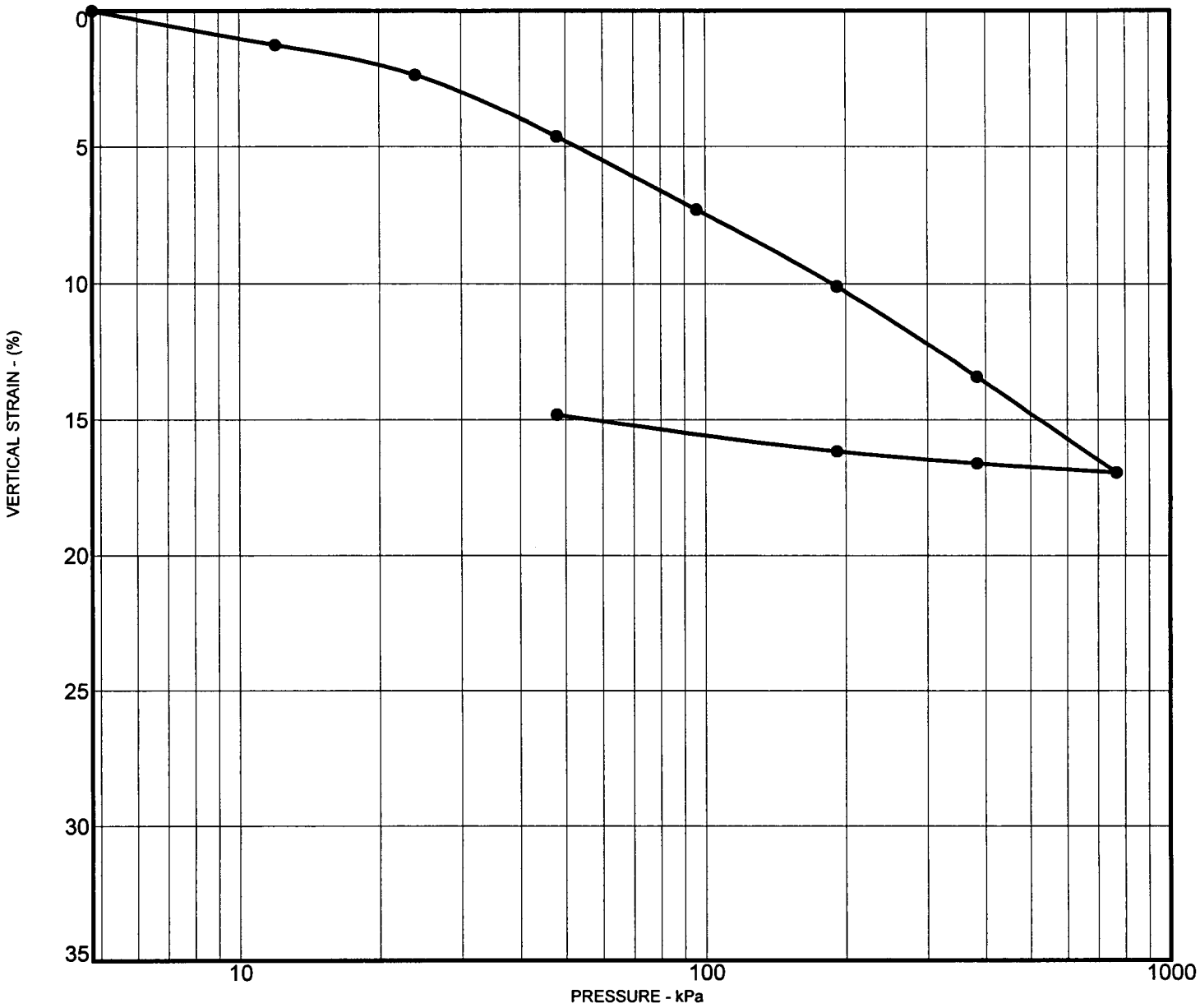
Boring Number:	SB-6-328
Sample Depth:	16.8 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	196.2	
Ring Weight	45.5	
Wet Wt.	150.7	
Wet + Tare		201.9
Dry + Tare		174.7
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
05/03/00	10:40:00			0203	
	13:10:00		4.8	0225	0.22
	16:45:00		12.0	0266	0.63
05/04/00	8:00:00		23.9	0324	1.21
05/05/00	8:10:00		47.9	0401	1.98
05/06/00	10:30:00		95.8	0498	2.95
05/07/00	11:30:00		191.5	0613	4.10
05/08/00	8:10:00		383.0	0750	5.47
05/09/00	8:50:00		766.1	0917	7.14
	14:00:00		383.0	0892	6.89
	18:20:00		191.5	0863	6.60
05/10/00	8:00:00		47.9	0795	5.92



Sample	SB- 6-333
Depth	4.57 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.0	15.3
Water content, %	39.8	30.3
Sample height, mm	25.4	21.6

KLEINFELDER

PROJECT NO. 35-8163-05

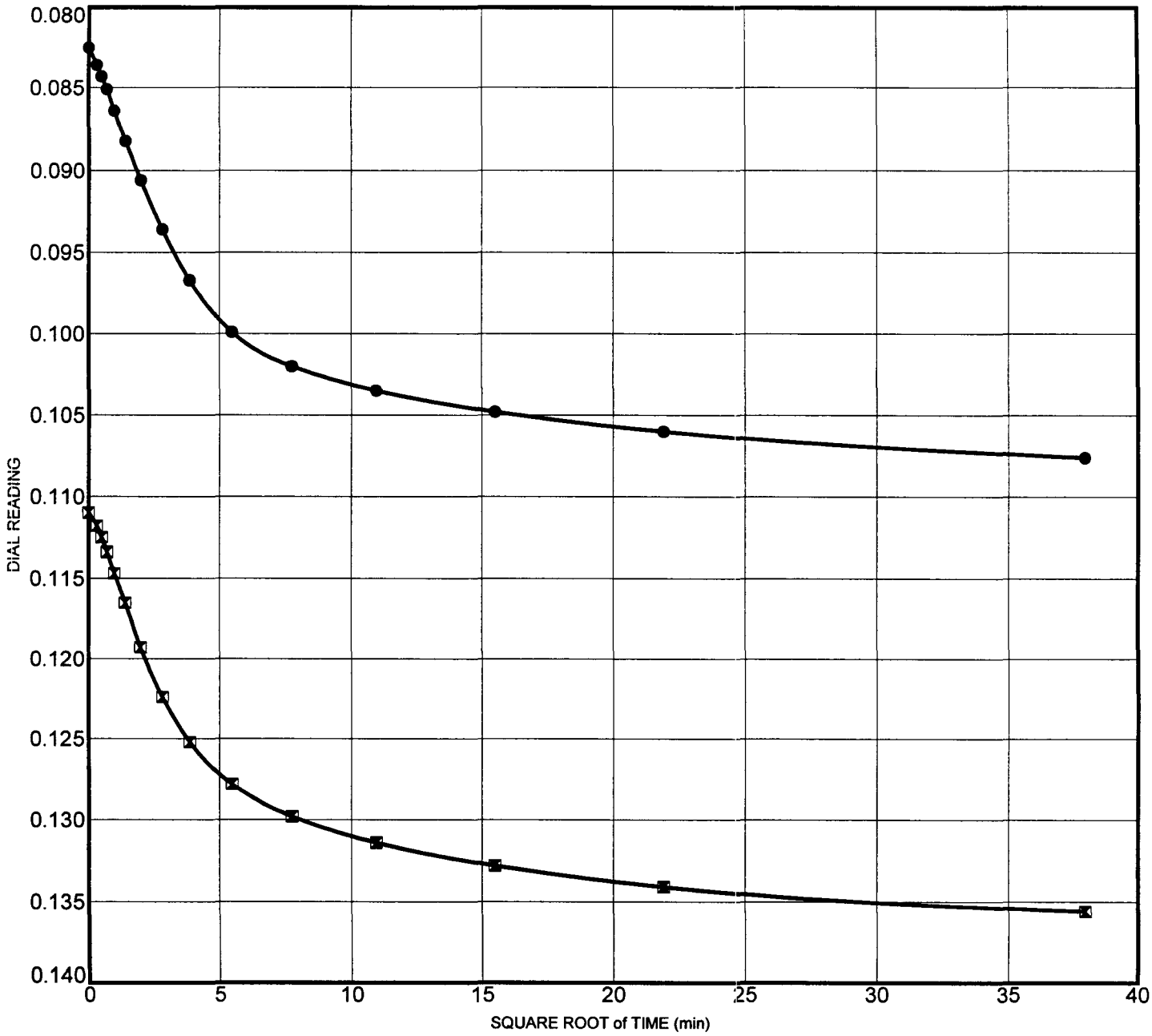
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-225



Sample	**SB- 6-333**	
Depth	**4.6 m**	
Pressure (MPa)	● **0.10**	⊠ **0.19**
Cv (m^2/day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-226

PROJECT NO. **35-8163-05**

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-6-333
Sample Depth:	4.6 m

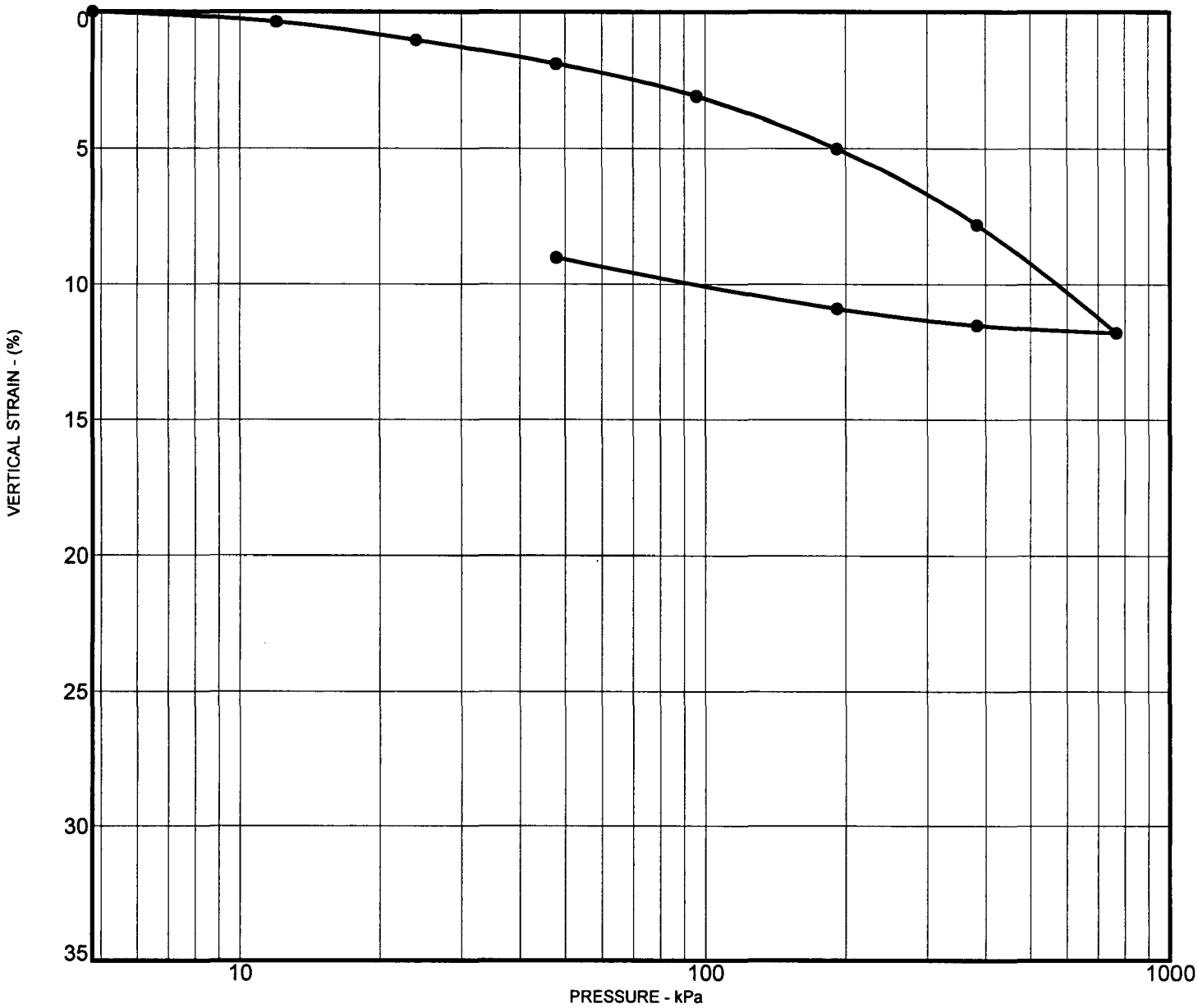
	Before Test (g)	After Test (g)
Wet Wt. + Ring	183.9	
Ring Weight	45.9	
Wet Wt.	138.0	
Wet + Tare		183.1
Dry + Tare		153.2
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	20.6
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/24/00	16:20:00			0167	
	19:00:00		4.8	0347	1.80
	8:10:00		12.0	0475	3.08
04/26/00	9:45:00		23.9	0586	4.19
	8:00:00		47.9	0810	6.43
	8:15:00	0:00:00	95.8	0825	6.58
	8:15:06	0:00:06		0836	
	8:15:15	0:00:15		0843	
	8:15:30	0:00:30		0851	
	8:16:00	0:01:00		0864	
	8:17:00	0:02:00		0882	
	8:19:00	0:04:00		0906	
	8:23:00	0:08:00		0936	
	8:30:00	0:15:00		0967	
	8:45:00	0:30:00		0999	
	9:15:00	1:00:00		1020	
	10:15:00	2:00:00		1035	
	12:15:00	4:00:00		1048	
	16:15:00	8:00:00		1060	
04/29/00	8:15:00	24:00:00	95.8	1076	9.09
04/30/00	10:06:00	0:00:00	191.5	1110	9.43
03/29/00	10:06:06	0:00:06		1118	
	10:06:15	0:00:15		1125	
	10:06:30	0:00:30		1134	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	10:07:00	0:01:00		1147	
	10:08:00	0:02:00		1165	
	10:10:00	0:04:00		1193	
	10:14:00	0:08:00		1224	
	10:21:00	0:15:00		1252	
	10:36:00	0:30:00		1278	
	11:06:00	1:00:00		1298	
	12:06:00	2:00:00		1314	
	14:06:00	4:00:00		1328	
	18:06:00	8:00:00		1341	
05/01/00	10:06:00	24:00:00	191.5	1356	11.89
05/02/00	7:00:00		383.0	1688	15.21
05/03/00	7:50:00		766.1	2042	18.75
	12:10:00		383.0	2008	18.41
	15:30:00		191.5	1963	17.96
05/04/00	8:00:00		47.9	1828	16.61



Sample	SB- 6-333
Depth	13.72 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.3	14.7
Water content, %	36.9	32.0
Sample height, mm	25.4	23.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-229

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

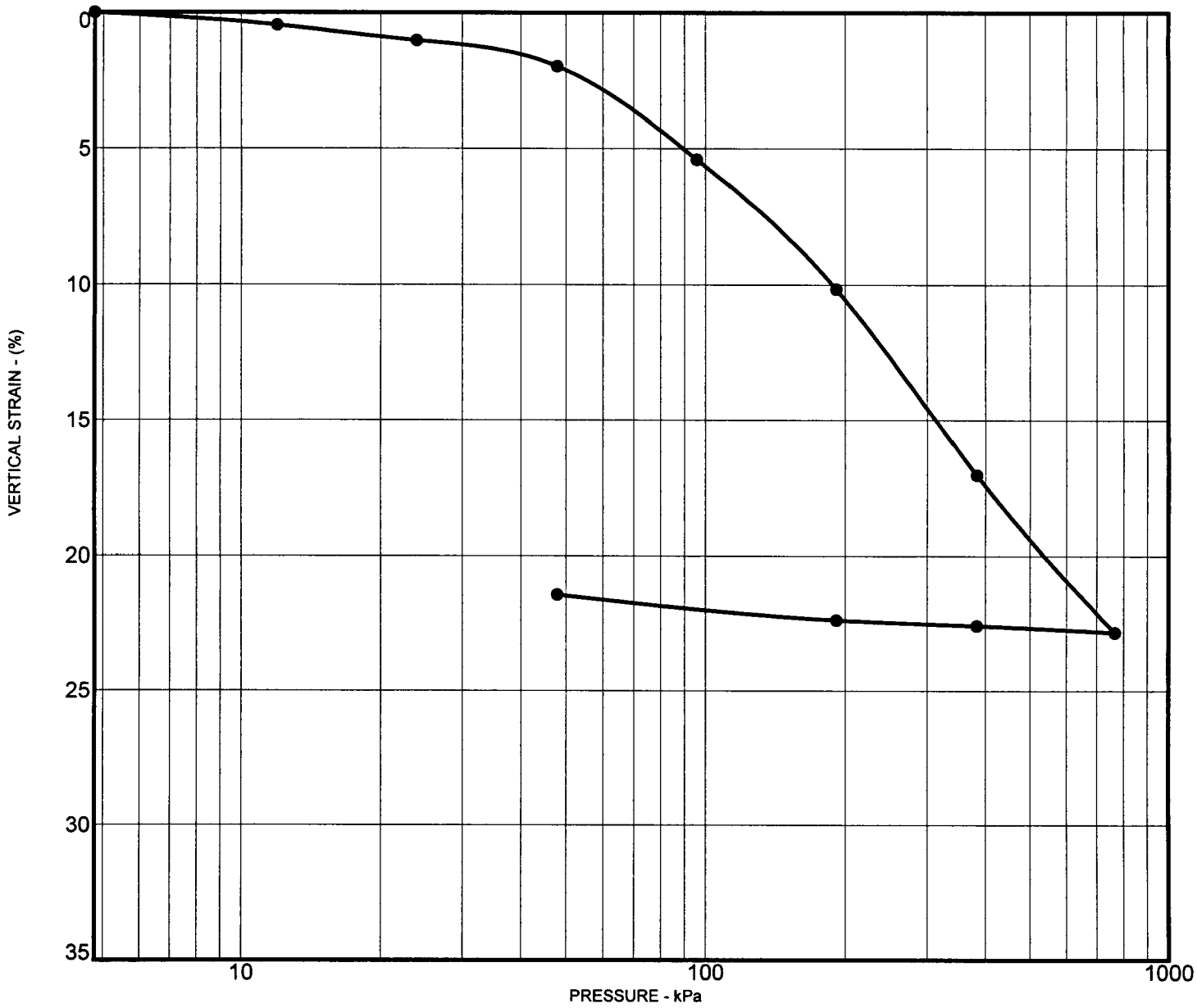
Boring Number:	SB-6-333
Sample Depth:	13.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	183.3	
Ring Weight	45.2	
Wet Wt.	138.1	
Wet + Tare		186.7
Dry + Tare		451.4
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/25/00	8:50:00			0190	
	10:30:00		4.8	0196	0.06
	12:30:00		12.0	0234	0.44
04/26/00	9:45:00		23.9	0301	1.11
04/27/00	7:00:00		47.9	0389	1.99
	17:00:00		95.8	0508	3.18
04/28/00	9:30:00		191.5	0698	5.08
04/29/00	11:00:00		383.0	0975	7.85
04/30/00	10:15:00		766.1	1392	12.02
	12:00:00		383.0	1348	11.58
	14:00:00		191.5	1287	10.97
05/01/00	7:00:00		47.9	1097	9.07



Sample	SB- 8-253
Depth	3.05 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	11.1	14.1
Water content, %	53.4	36.2
Sample height, mm	25.4	20.1

KLEINFELDER

PROJECT NO. 35-8163-05

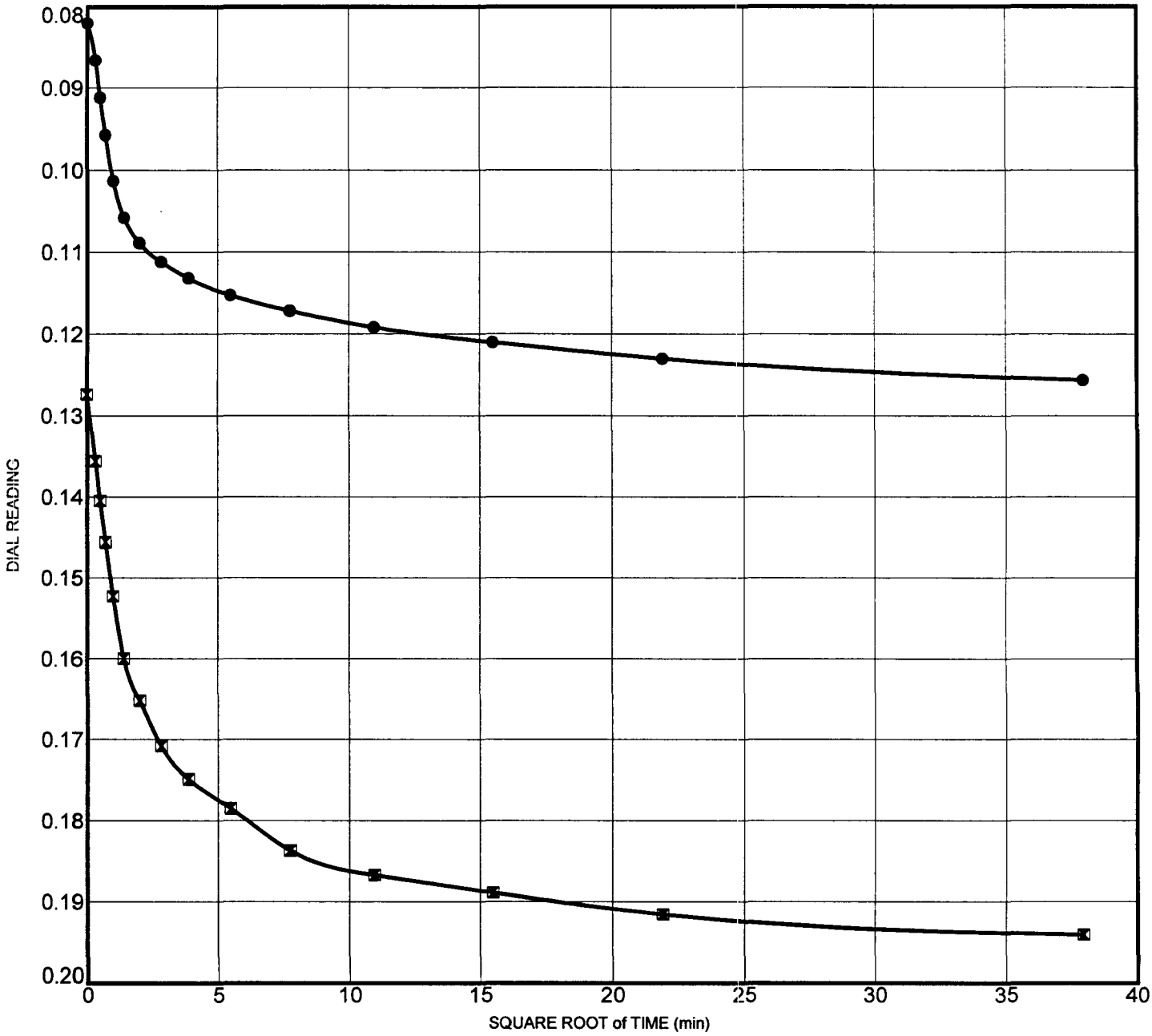
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-231



Sample	**SB- 8-253**	
Depth	**3.1 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-232

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-8-253
Sample Depth:	3.0 m

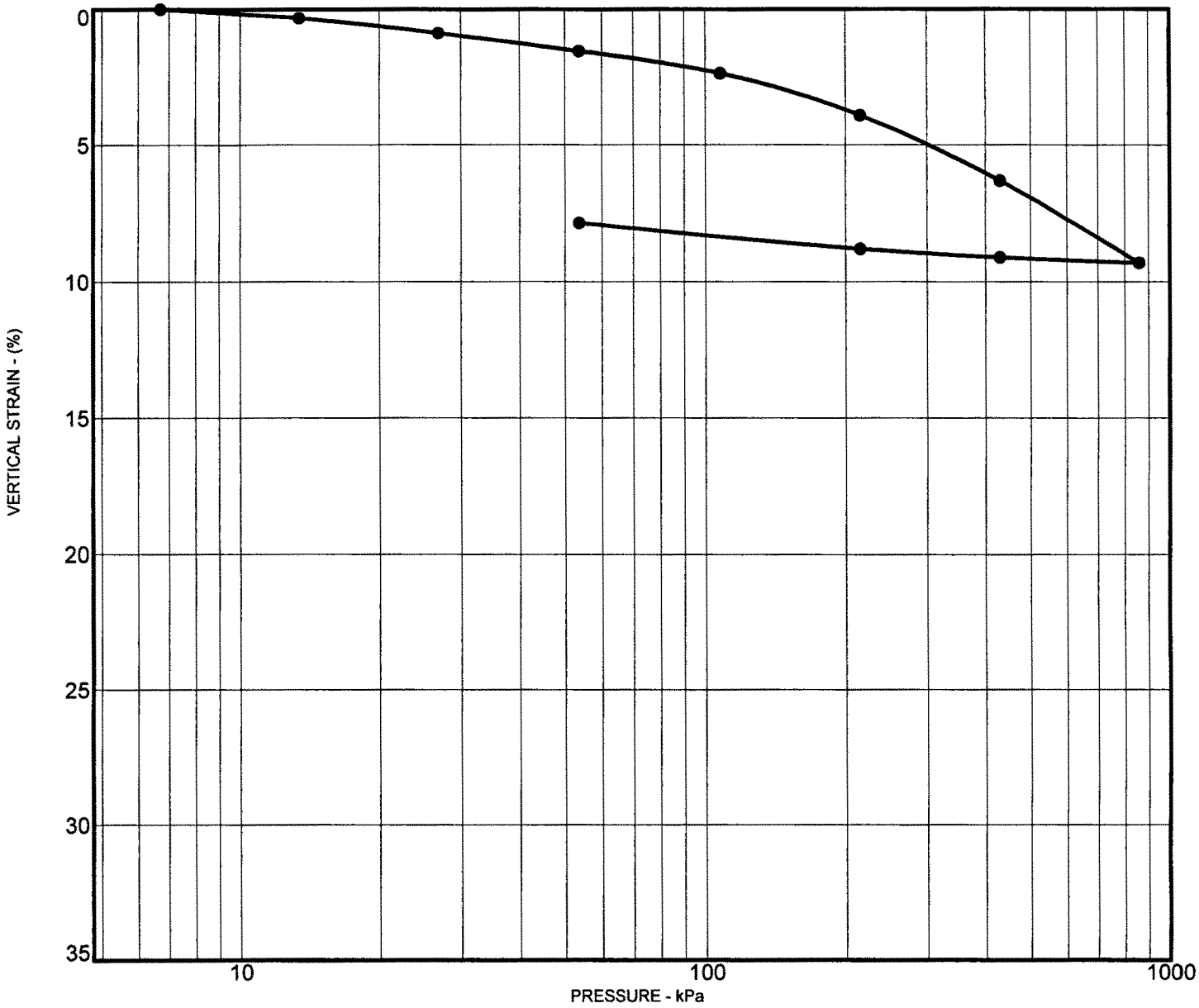
	Before Test (g)	After Test (g)
Wet Wt. + Ring	173.8	
Ring Weight	45.1	
Wet Wt.	128.7	
Wet + Tare		167.7
Dry + Tare		137.3
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	19.6
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/14/00	8:25:00			0206	
	10:20:00		4.8	0240	0.34
	17:00:00		12.0	0287	0.81
03/15/00	7:30:00		23.9	0344	1.38
	15:40:00		47.9	0439	2.33
03/16/00	7:45:00		95.8	0780	5.74
	7:57:00	0:00:00	191.5	0820	
	7:57:06	0:00:06		0866	
	7:57:15	0:00:15		0912	
	7:57:30	0:00:30		0957	
	7:58:00	0:01:00		1013	
	7:59:00	0:02:00		1058	
	8:01:00	0:04:00		1089	
	8:05:00	0:08:00		1112	
	8:12:00	0:15:00		1132	
	8:27:00	0:30:00		1153	
	8:57:00	1:00:00		1172	
	9:57:00	2:00:00		1192	
	11:57:00	4:00:00		1210	
	15:57:00	8:00:00		1230	
03/17/00	7:57:00	24:00:00	191.5	1256	10.50
	8:05:00	0:00:00	383.0	1274	10.68
	8:05:06	0:00:06		1356	
	8:05:15	0:00:15		1405	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	8:05:30	0:00:30		1456	
	8:06:00	0:01:00		1523	
	8:07:00	0:02:00		1600	
	8:09:00	0:04:00		1652	
	8:13:00	0:08:00		1708	
	8:20:00	0:15:00		1749	
	8:35:00	0:30:00		1785	
	9:05:00	1:00:00		1837	
	10:05:00	2:00:00		1867	
	12:05:00	4:00:00		1889	
	16:05:00	8:00:00		1916	
03/18/00	8:05:00	24:00:00	383.0	1941	17.35
03/19/00	10:00:00		766.1	2523	23.17
	18:00:00		383.0	2498	22.92
03/20/00	17:20:00		191.5	2442	22.36
03/21/00	7:50:00		47.9	2384	21.78



Sample	SB- 8-253
Depth	13.72 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.2	16.4
Water content, %	28.4	25.1
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-235

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

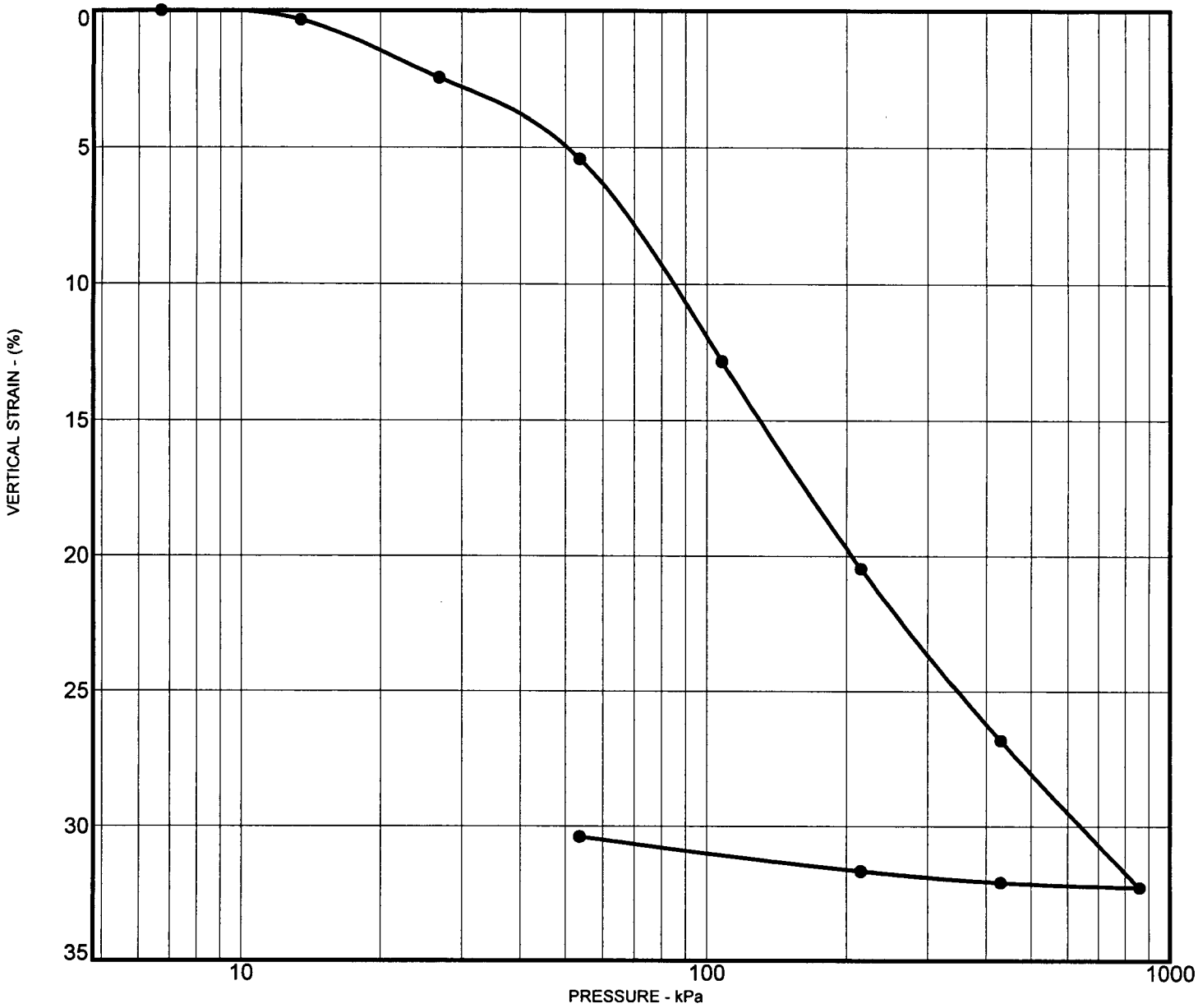
Boring Number:	SB-8-253
Sample Depth:	13.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	192.2	
Ring Weight	45	
Wet Wt.	147.2	
Wet + Tare		197
Dry + Tare		168.2
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/14/00	10:50:00			0209	
	13:20:00		6.7	0262	0.53
	18:45:00		13.4	0296	0.87
03/15/00	7:30:00		26.8	0352	1.43
	15:40:00		53.6	0419	2.10
	19:30:00		107.7	0501	2.92
03/16/00	17:00:00		215.0	0655	4.46
03/17/00	16:30:00		430.0	0892	6.83
03/18/00	17:00:00		859.9	1192	9.83
03/19/00	9:50:00		430.0	1172	9.63
	18:00:00		215.0	1141	9.32
03/21/00	7:20:00		107.7	1096	8.87
	13:10:00		53.6	1046	8.37



Sample	**SB- 8-254**
Depth	**3.05 m**
Classification	**CH**

	Initial	Final
Dry density, kN/m^3	**9.7**	**15.0**
Water content, %	**63.8**	**35.8**
Sample height, mm	**25.4**	**16.5**

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

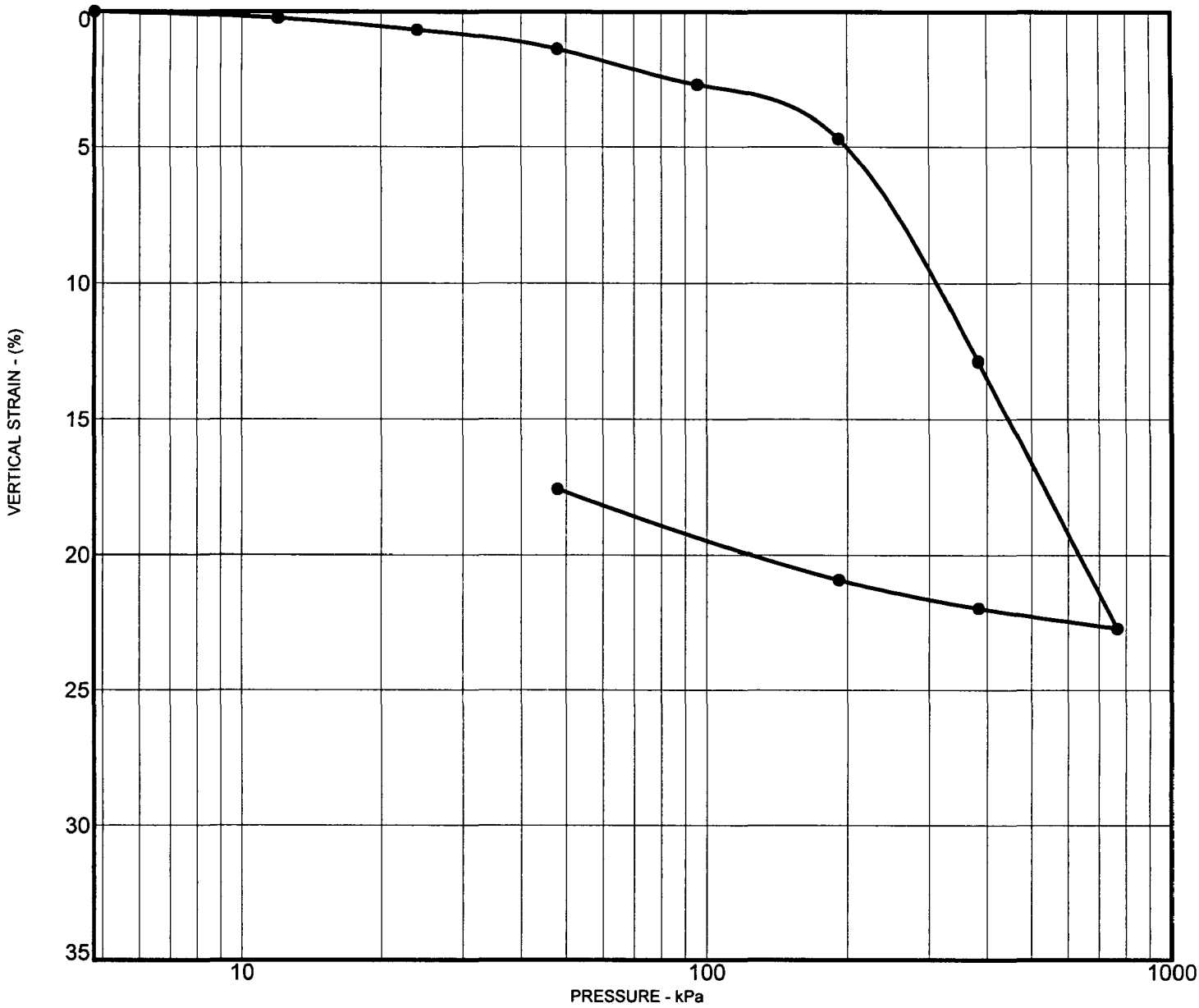
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-237

(This page left blank intentionally.)



Sample	SB- 8-254
Depth	18.29 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	10.1	12.2
Water content, %	60.1	46.6
Sample height, mm	25.4	20.8

KLEINFELDER

PROJECT NO. 35-8163-05

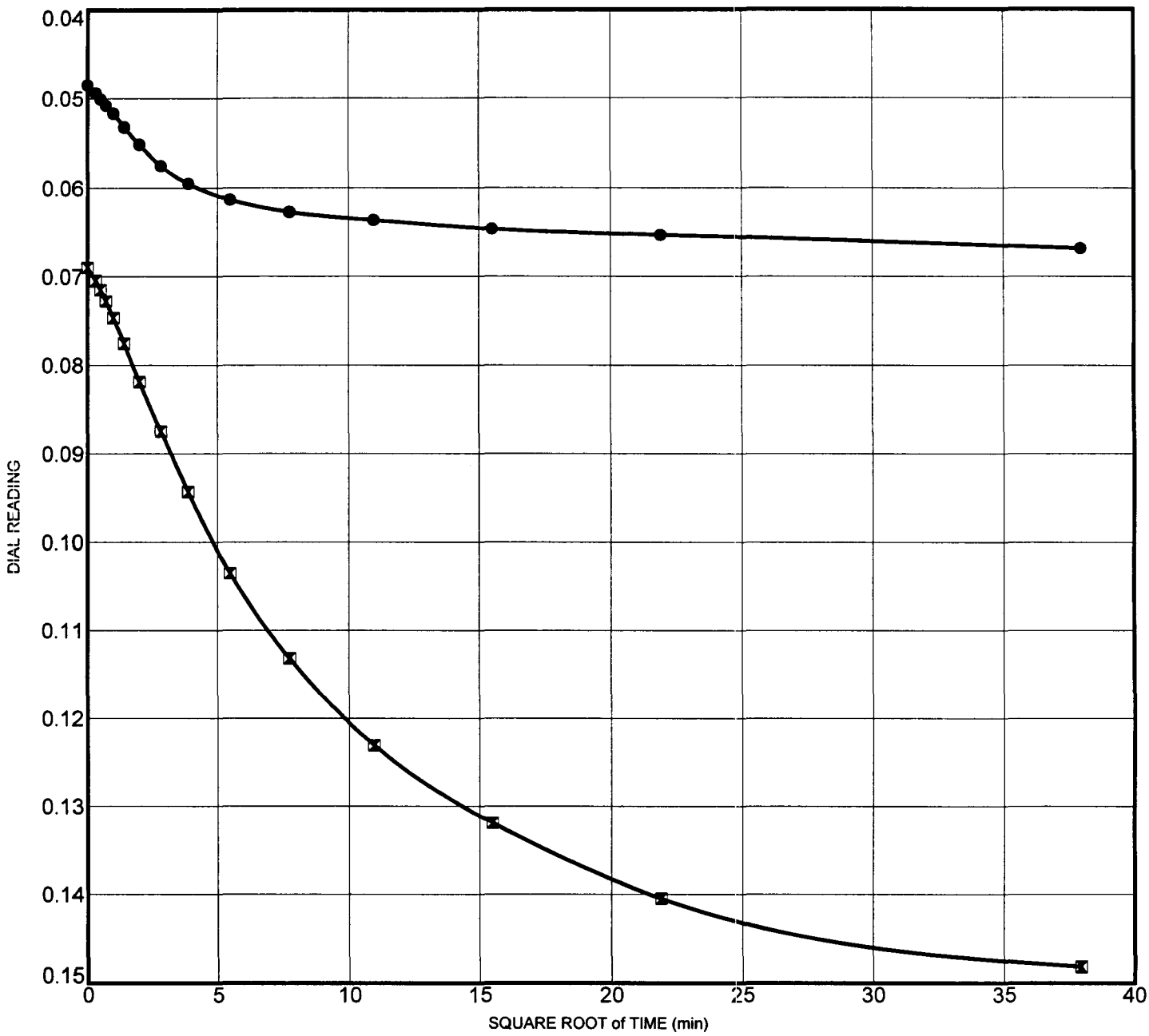
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-239



Sample	**SB- 8-254**	
Depth	**18.3 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-240

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-8-254
Sample Depth:	18.3 m

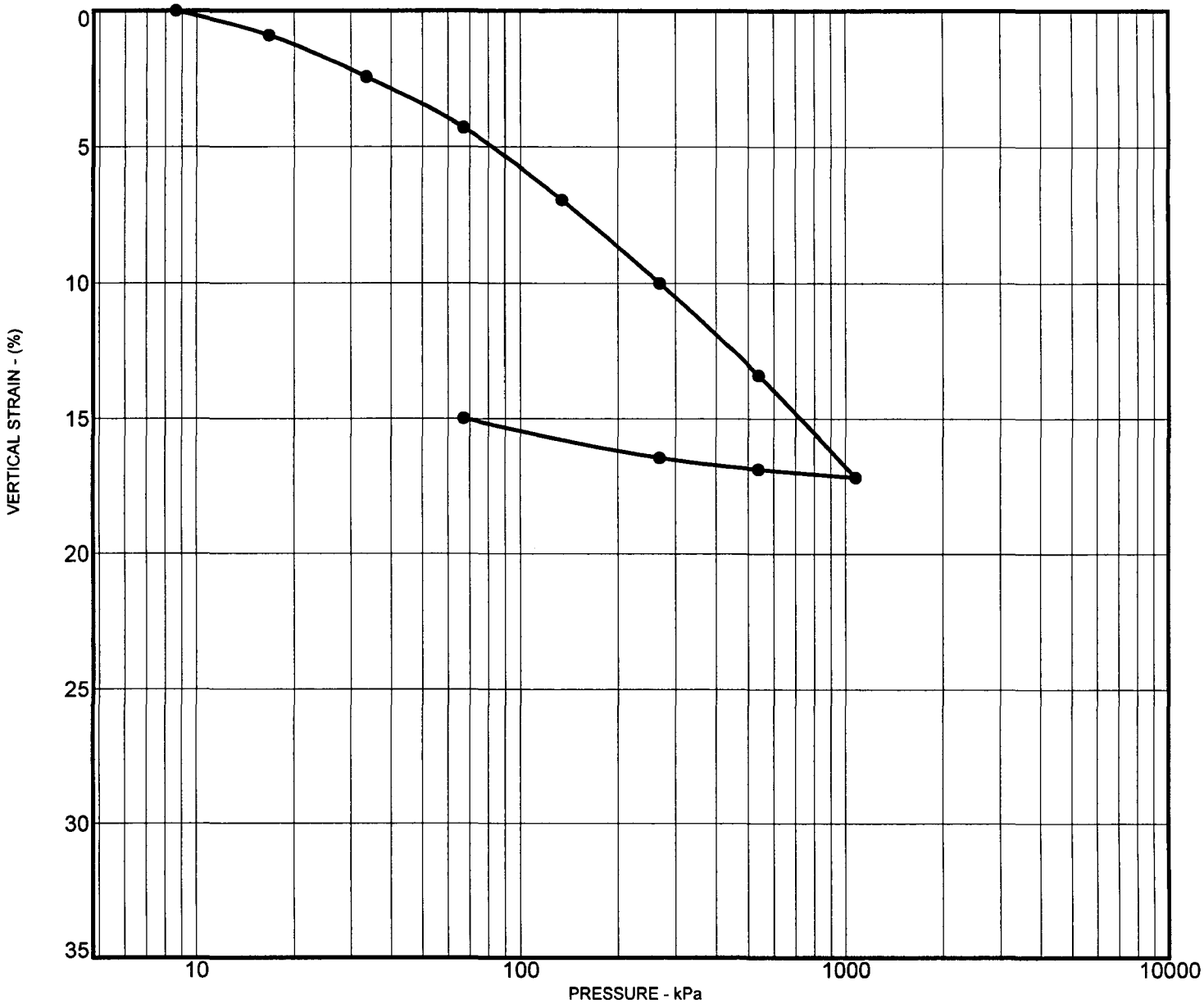
	Before Test (g)	After Test (g)
Wet Wt. + Ring	167.1	
Ring Weight	45.1	
Wet Wt.	122.0	
Wet + Tare		165.4
Dry + Tare		129.9
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	19.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/21/00	15:25:00			0223	
	16:00:00		4.8	0197	-0.26
	19:30:00		12.0	0221	-0.02
03/22/00	8:14:00		23.9	0265	0.42
	14:10:00		47.9	0337	1.14
03/24/00	8:00:00		95.8	0470	2.47
	8:00:00	0:00:00	191.5	0485	
	8:00:06	0:00:06		0494	
	8:00:15	0:00:15		0501	
	8:00:30	0:00:30		0508	
	8:01:00	0:01:00		0517	
	8:02:00	0:02:00		0532	
	8:04:00	0:04:00		0551	
	8:08:00	0:08:00		0575	
	8:15:00	0:15:00		0595	
	8:30:00	0:30:00		0613	
	9:00:00	1:00:00		0627	
	10:00:00	2:00:00		0636	
	12:00:00	4:00:00		0646	
	16:00:00	8:00:00		0653	
03/25/00	8:00:00	24:00:00	191.5	0668	4.45
	9:00:00	0:00:00	383.0	0690	4.67
	9:00:06	0:00:06		0705	
	9:00:15	0:00:15		0715	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	9:00:30	0:00:30		0728	
	9:01:00	0:01:00		0747	
	9:02:00	0:02:00		0776	
	9:04:00	0:04:00		0819	
	9:08:00	0:08:00		0875	
	9:15:00	0:15:00		0943	
	9:30:00	0:30:00		1035	
	10:00:00	1:00:00		1132	
	11:00:00	2:00:00		1231	
	13:00:00	4:00:00		1319	
	17:00:00	8:00:00		1405	
03/26/00	9:00:00	24:00:00	383.0	1482	12.59
03/27/00	19:30:00		766.1	2469	22.46
03/28/00	8:15:00		383.0	2394	21.71
	11:55:00		191.5	2288	20.65
	18:40:00		47.9	1954	17.31



Sample	SB- 9-298
Depth	1.52 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.9	16.3
Water content, %	35.1	24.9
Sample height, mm	25.4	21.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-243

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

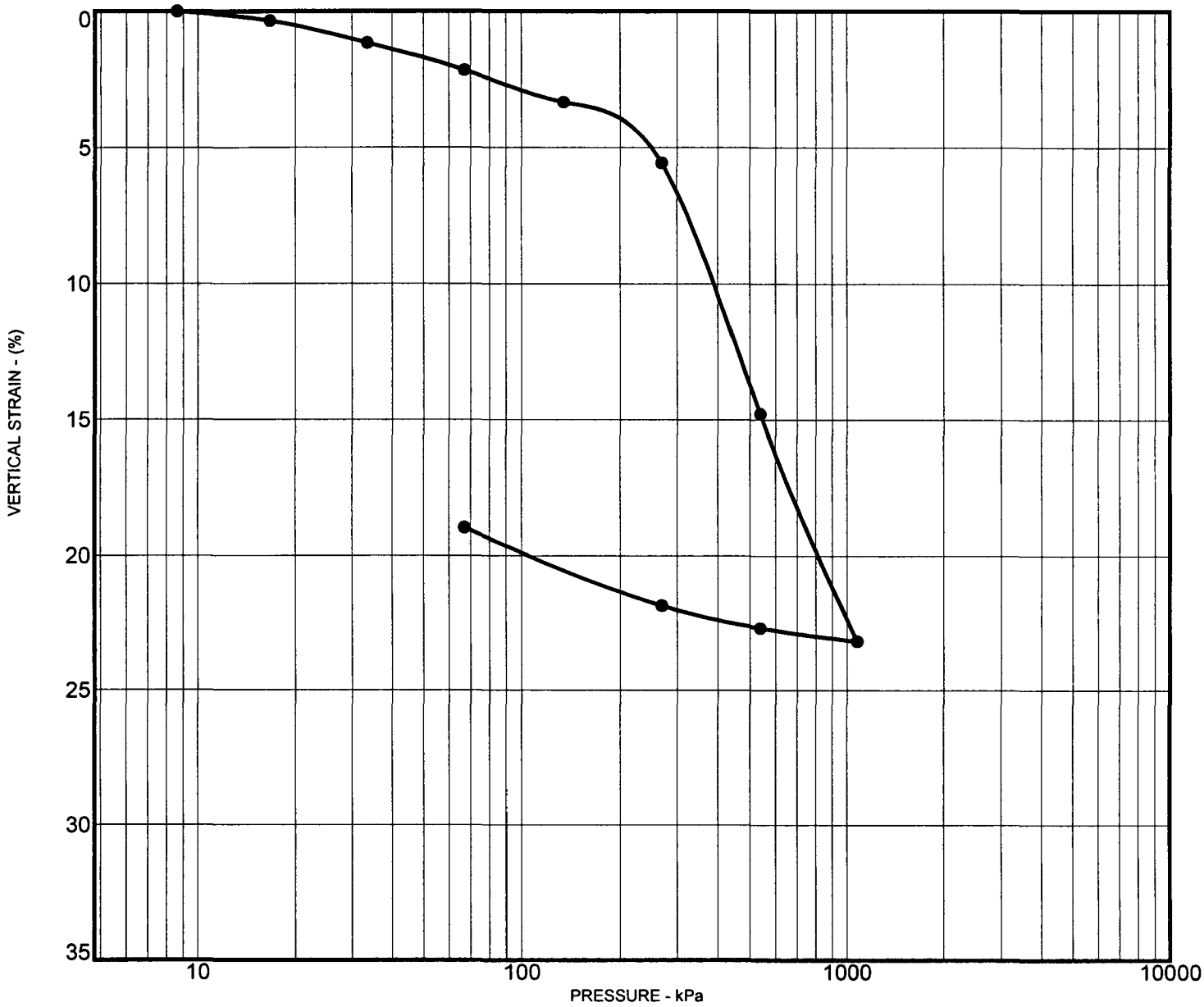
Boring Number:	SB-9-298
Sample Depth:	1.5 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	186.2	
Ring Weight	44.6	
Wet Wt.	141.6	
Wet + Tare		184
Dry + Tare		157.9
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/17/00	9:00:00			0209	
	13:10:00		8.6	0291	0.82
	18:00:00		16.8	0383	1.74
02/18/00	8:30:00		33.5	0536	3.27
	17:05:00		67.0	0722	5.13
02/19/00	11:00:00		134.5	0985	7.76
02/20/00	8:30:00		268.6	1291	10.82
02/21/00	8:15:00		537.7	1631	14.22
02/22/00	10:15:00		1075.4	2007	17.98
02/23/00	7:45:00		537.7	1979	17.70
	12:00:00		268.6	1936	17.27
02/24/00	8:50:00		67.0	1789	15.80



Sample	SB- 9-298
Depth	21.34 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	11.3	14.0
Water content, %	51.2	36.3
Sample height, mm	25.4	20.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-245

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

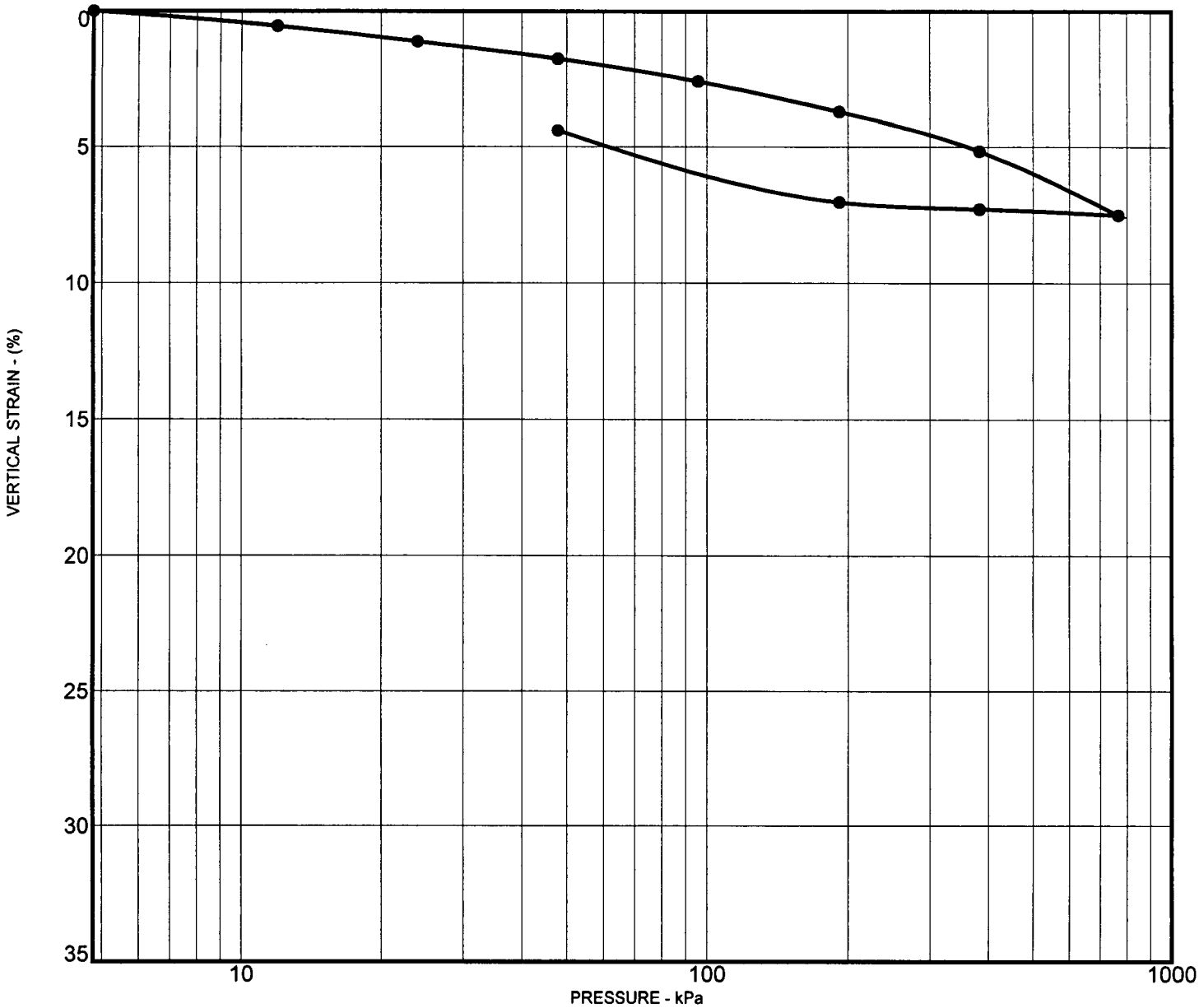
Boring Number:	SB-9-298
Sample Depth:	21.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	174.9	
Ring Weight	45.6	
Wet Wt.	129.3	
Wet + Tare		170.5
Dry + Tare		139.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/17/00	8:40:00			0194	
	13:10:00		8.6	0224	0.30
	18:00:00		16.8	0259	0.65
02/18/00	8:30:00		33.5	0342	1.48
	17:10:00		67.0	0442	2.48
02/19/00	11:00:00		134.5	0560	3.66
02/20/00	8:30:00		268.6	0780	5.86
02/21/00	14:45:00		537.7	1702	15.08
02/22/00	12:50:00		1075.4	2543	23.49
02/23/00	7:45:00		537.7	2493	22.99
	12:00:00		268.6	2409	22.15
02/24/00	8:50:00		67.0	2121	19.27



Sample	SB- 9-299
Depth	7.62 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.8	15.5
Water content, %	29.5	25.8
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-247

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

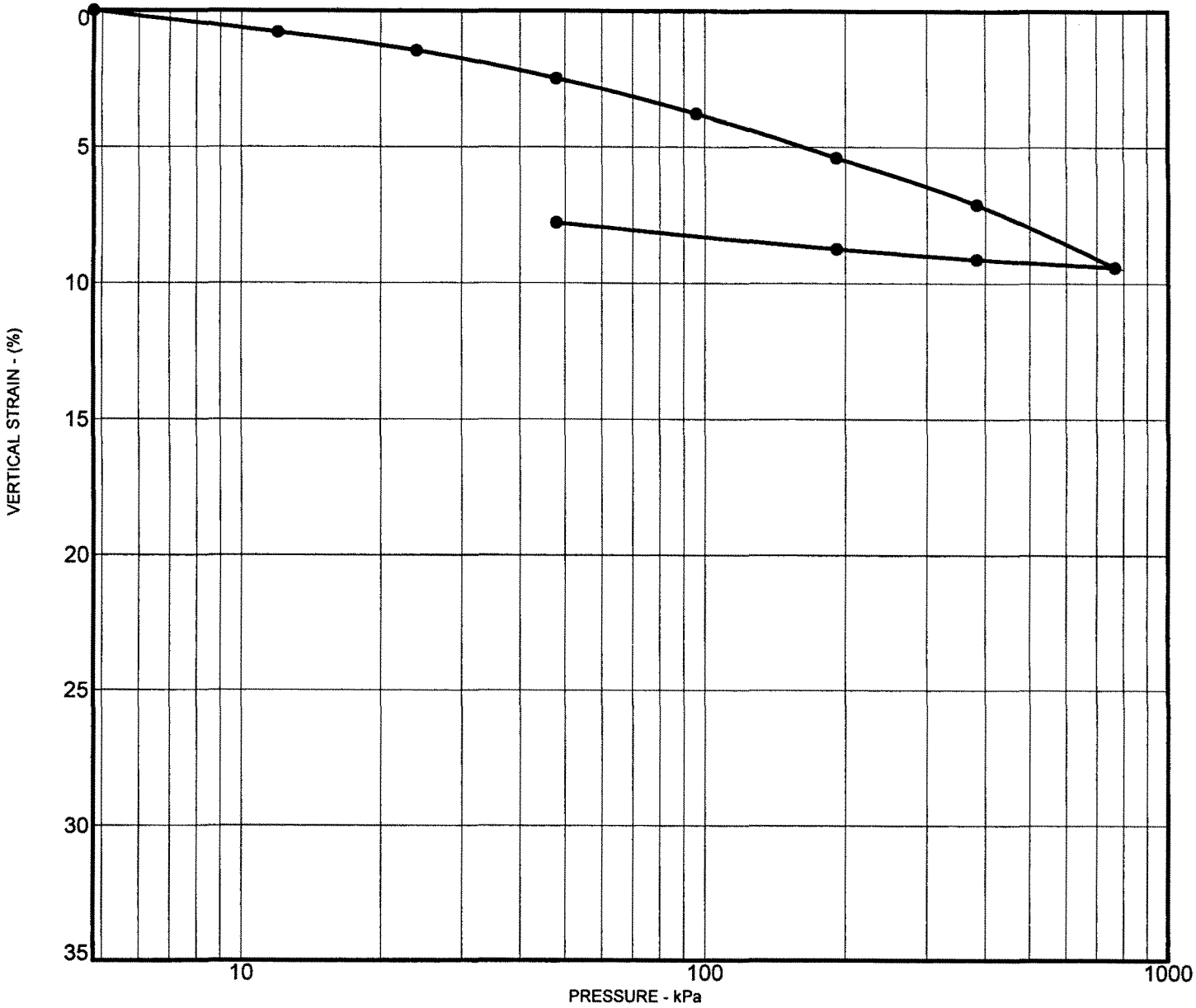
Boring Number:	SB-9-299
Sample Depth:	7.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	190.1	
Ring Weight	45.2	
Wet Wt.	144.9	
Wet + Tare		194.3
Dry + Tare		165.4
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/17/00	11:15:00			0212	
	14:00:00		4.8	0270	0.58
	17:50:00		12.0	0325	1.13
02/18/00	8:30:00		23.9	0383	1.71
	15:45:00		47.9	0447	2.35
02/19/00	11:00:00		95.8	0530	3.18
02/20/00	8:30:00		191.5	0641	4.29
02/21/00	8:20:00		383.0	0786	5.74
02/22/00	12:20:00		766.1	1021	8.09
02/23/00	7:50:00		383.0	0999	7.87
	12:00:00		191.5	0974	7.62
	15:44:00		47.9	0710	4.98



Sample	SB- 9-299
Depth	18.29 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.1	16.3
Water content, %	27.8	24.2
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

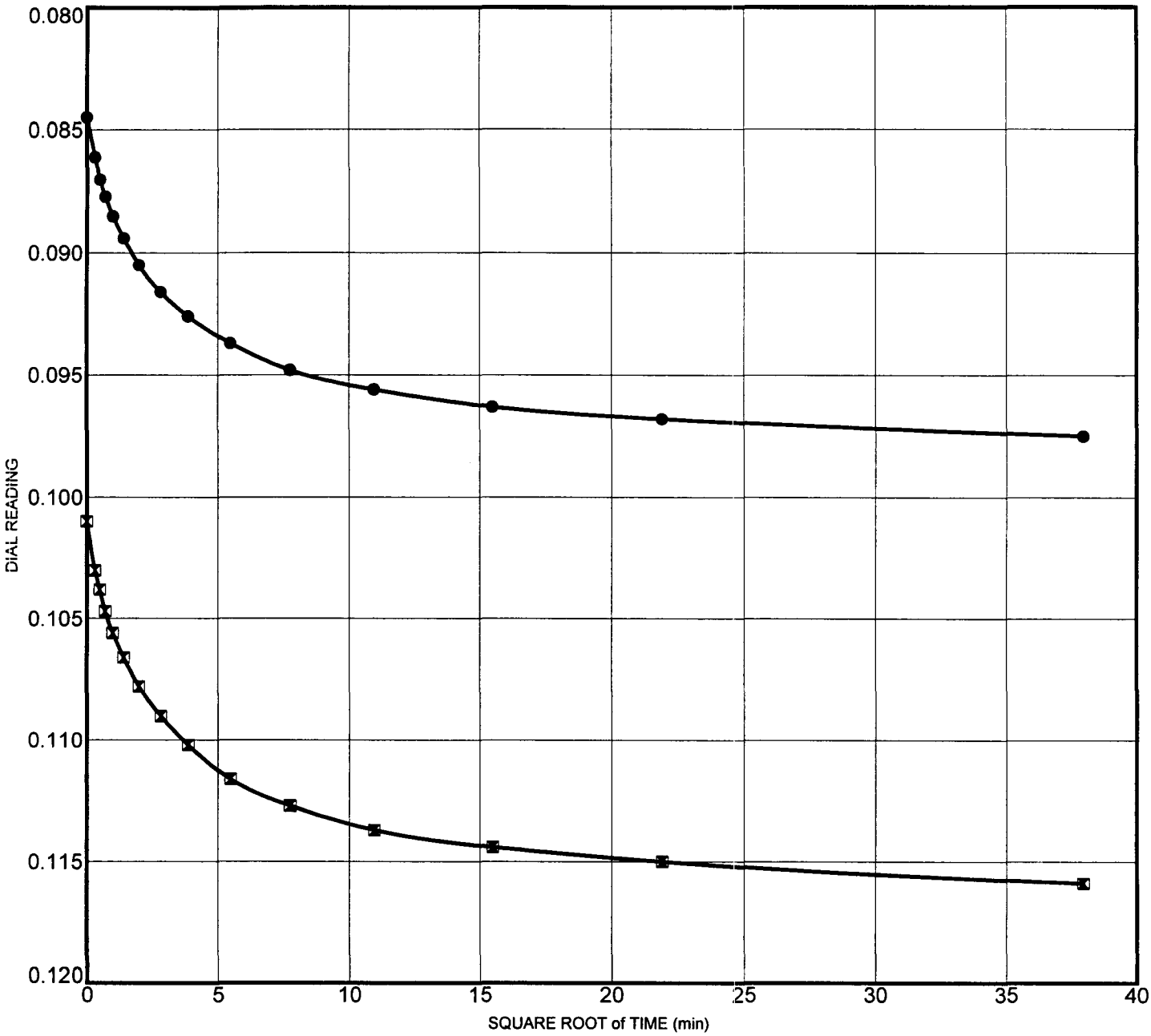
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-249



Sample	**SB- 9-299**	
Depth	**18.3 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

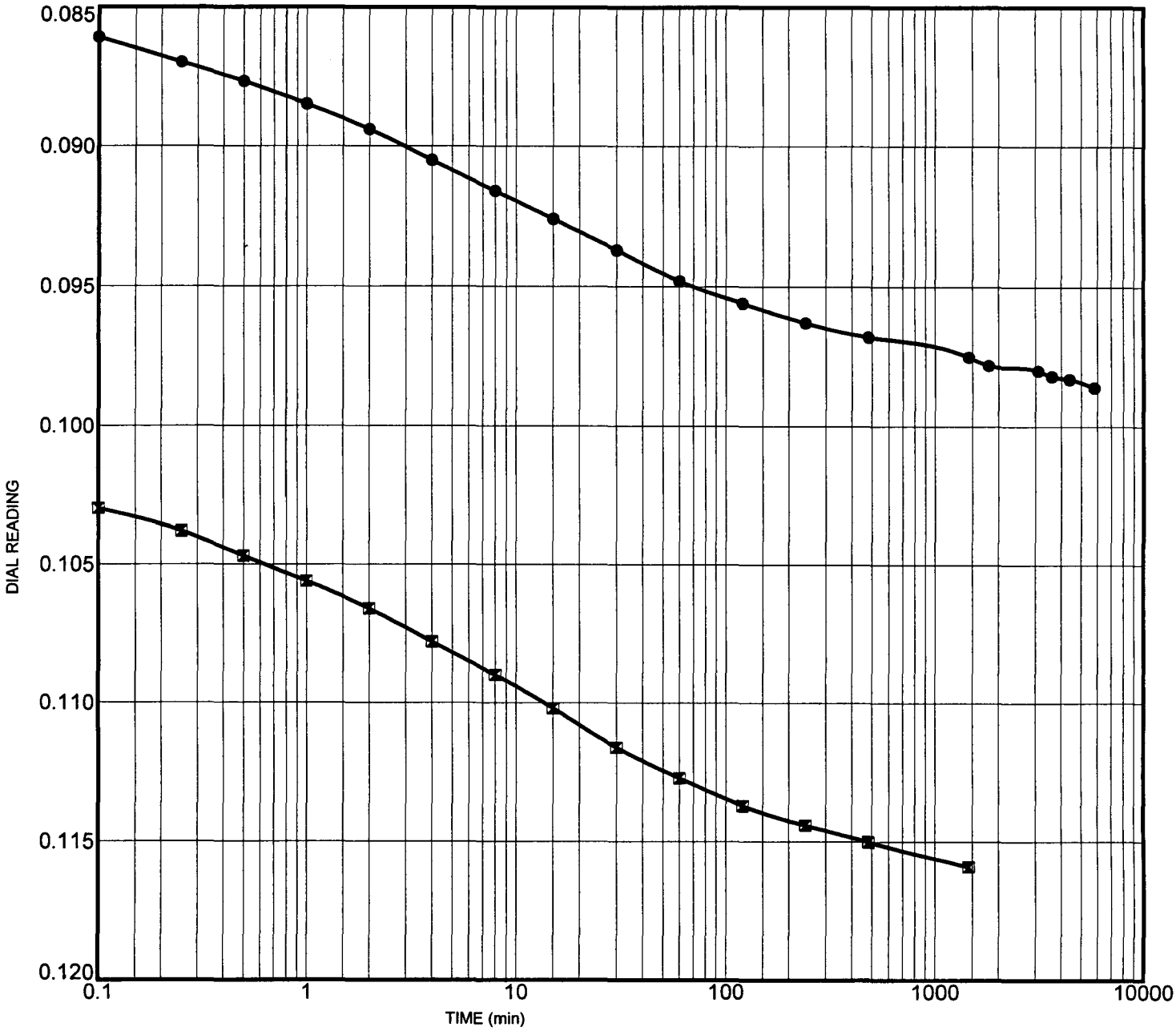
I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-250

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00



Sample	**SB- 9-299**	
Depth	**18.3 m**	
Pressure (kPa)	● **0.19**	⧗ **0.38**
Ca (m /day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

SECONDARY CONSOLIDATION

PLATE

K-251

PROJECT NO. **35-8163-05**

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-9-299
Sample Depth:	18.3 m

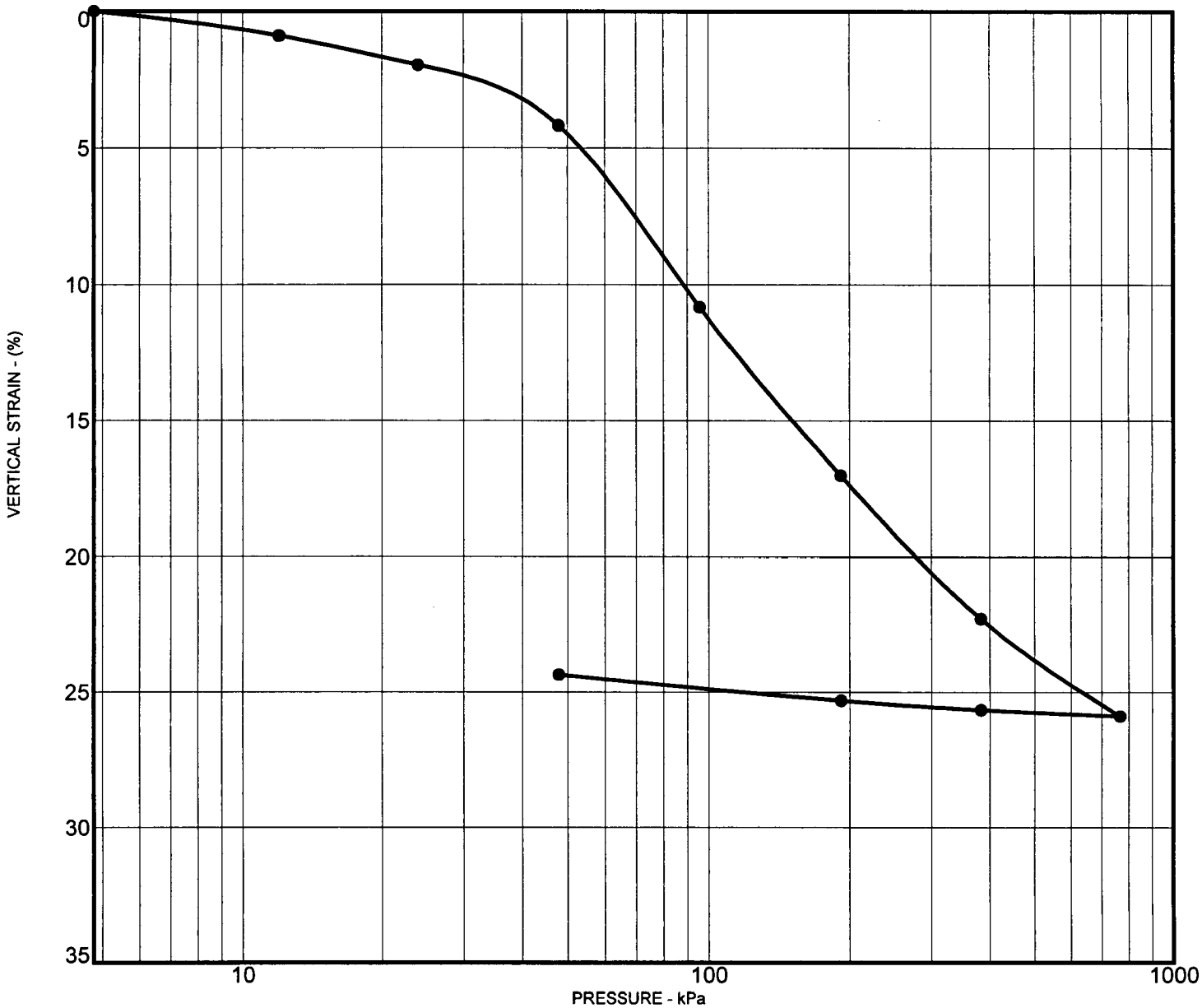
	Before Test (g)	After Test (g)
Wet Wt. + Ring	190.8	
Ring Weight	45.1	
Wet Wt.	145.7	
Wet + Tare		195
Dry + Tare		167.4
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	23.6
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/21/00	14:35:00			0415	
	16:00:00		4.8	0447	0.32
02/22/00	10:25:00		12.0	0528	1.13
	19:45:00		23.9	0596	1.81
02/23/00	7:50:00		47.9	0698	2.83
02/24/00	7:25:00		95.8	0827	4.12
	7:25:00	0:00:00	191.5	0845	
	7:25:06	0:00:06		0861	
	7:25:15	0:00:15		0870	
	7:25:30	0:00:30		0877	
	7:26:00	0:01:00		0885	
	7:27:00	0:02:00		0894	
	7:29:00	0:04:00		0905	
	7:33:00	0:08:00		0916	
	7:40:00	0:15:00		0926	
	7:55:00	0:30:00		0937	
	8:25:00	1:00:00		0948	
	9:25:00	2:00:00		0956	
	11:25:00	4:00:00		0963	
	15:25:00	8:00:00		0968	
02/25/00	7:25:00	24:00:00		0975	
	13:20:00	29:55:00		0978	
02/26/00	11:00:00	51:35:00		0980	
	19:30:00	60:05:00		0982	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/27/00	8:30:00	73:00:00		0983	
02/28/00	8:00:00	96:30:00	191.5	0986	5.71
	8:00:00	0:00:00	383.0	1010	5.95
	8:00:06	0:00:06		1030	
	8:00:15	0:00:15		1038	
	8:00:30	0:00:30		1047	
	8:01:00	0:01:00		1056	
	8:02:00	0:02:00		1066	
	8:04:00	0:04:00		1078	
	8:08:00	0:08:00		1090	
	8:15:00	0:15:00		1102	
	8:30:00	0:30:00		1116	
	9:00:00	1:00:00		1127	
	10:00:00	2:00:00		1137	
	12:00:00	4:00:00		1144	
	16:00:00	8:00:00		1150	
02/29/00	8:00:00	24:00:00	383.0	1159	7.44
03/01/00	7:50:00		766.1	1389	9.74
	16:40:00		383.0	1360	9.45
03/02/00	7:50:00		191.5	1321	9.06
	14:00:00		47.9	1225	8.10



Sample	SB-10-300
Depth	3.05 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	9.9	13.1
Water content, %	63.2	39.0
Sample height, mm	25.4	19.3

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-254

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

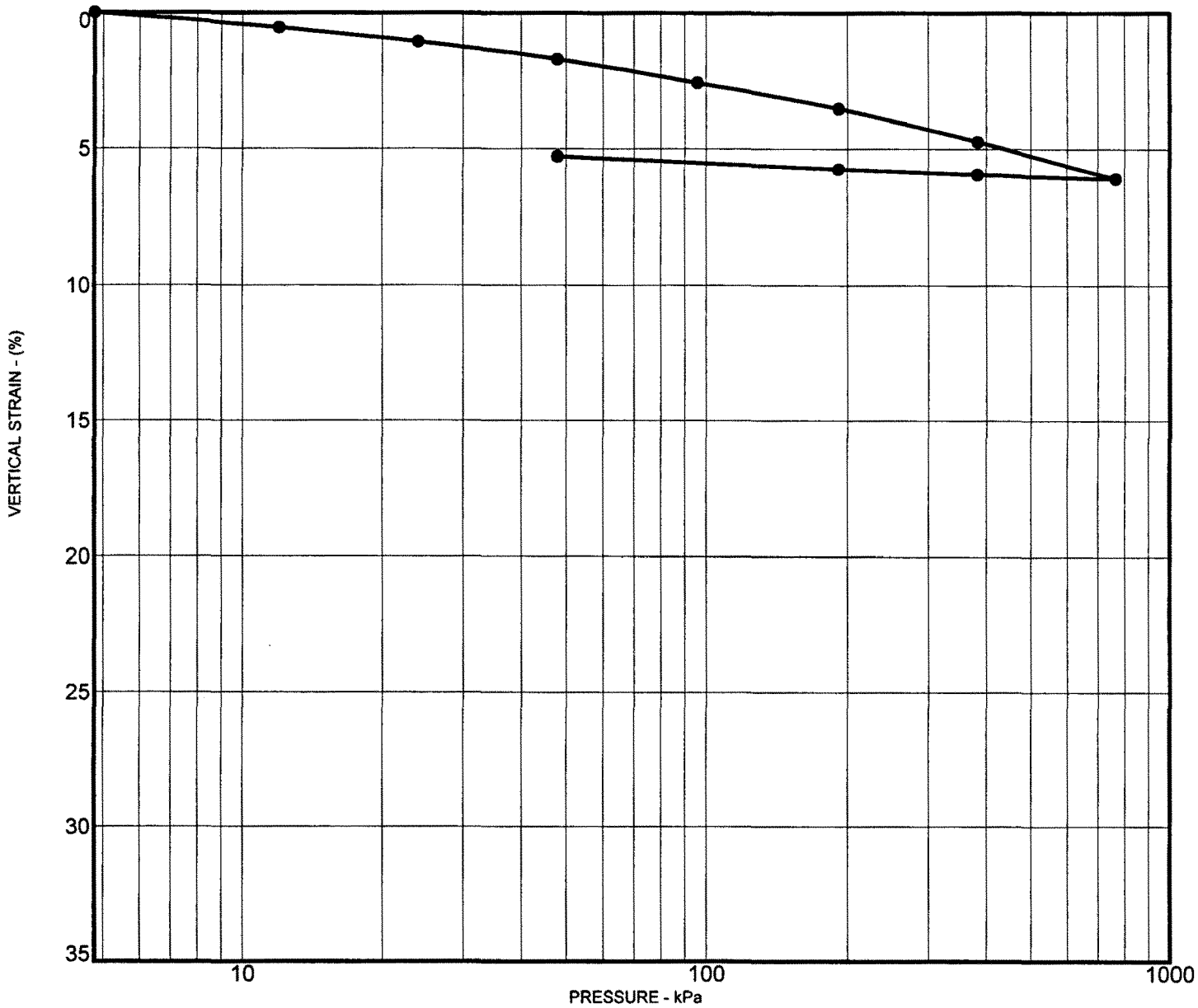
Boring Number:	SB-10-300
Sample Depth:	3.0 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	166.7	
Ring Weight	44.5	
Wet Wt.	122.2	
Wet + Tare		156.9
Dry + Tare		127.7
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	9:15:00			0201	
	12:00:00		4.8	0229	0.28
	19:00:00		12.0	0320	1.19
02/29/00	8:00:00		23.9	0427	2.26
03/01/00	7:50:00		47.9	0648	4.47
03/03/00	8:00:00		95.8	1311	11.10
03/04/00	9:50:00		191.5	1929	17.28
03/05/00	17:40:00		383.0	2456	22.55
03/06/00	19:30:00		766.1	2817	26.16
03/07/00	7:55:00		383.0	2794	25.93
	11:40:00		191.5	2760	25.59
	17:00:00		47.9	2664	24.63



Sample	SB-10-300
Depth	9.14 m
Classification	SC

	Initial	Final
Dry density, kN/m^3	17.8	18.8
Water content, %	19.5	15.8
Sample height, mm	25.4	24.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-256

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

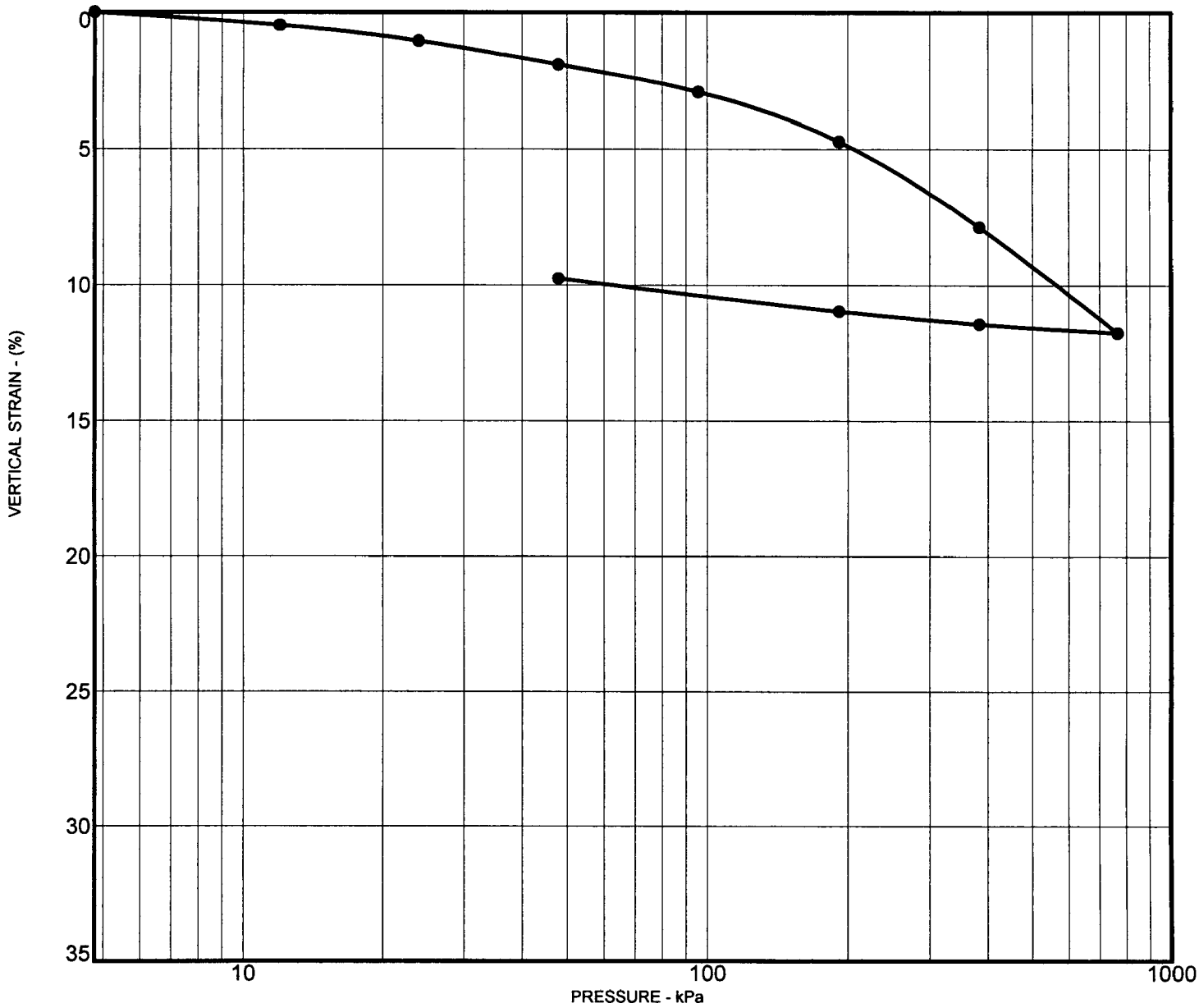
Boring Number:	SB-10-300
Sample Depth:	9.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	206.3	
Ring Weight	45.3	
Wet Wt.	161.0	
Wet + Tare		209.8
Dry + Tare		188.5
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	9:30:00			0216	
	12:00:00		4.8	0451	2.35
	19:00:00		12.0	0507	2.91
02/29/00	8:00:00		23.9	0560	3.44
	15:50:00		47.9	0624	4.08
03/01/00	7:50:00		95.8	0710	4.94
	16:40:00		191.5	0805	5.89
03/02/00	17:25:00		383.0	0925	7.09
03/03/00	13:50:00		766.1	1059	8.43
03/04/00	9:45:00		383.0	1044	8.28
	12:00:00		191.5	1024	8.08
	17:45:00		47.9	0978	7.62



Sample	SB-10-303
Depth	12.19 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.6	16.2
Water content, %	32.2	26.5
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-258

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

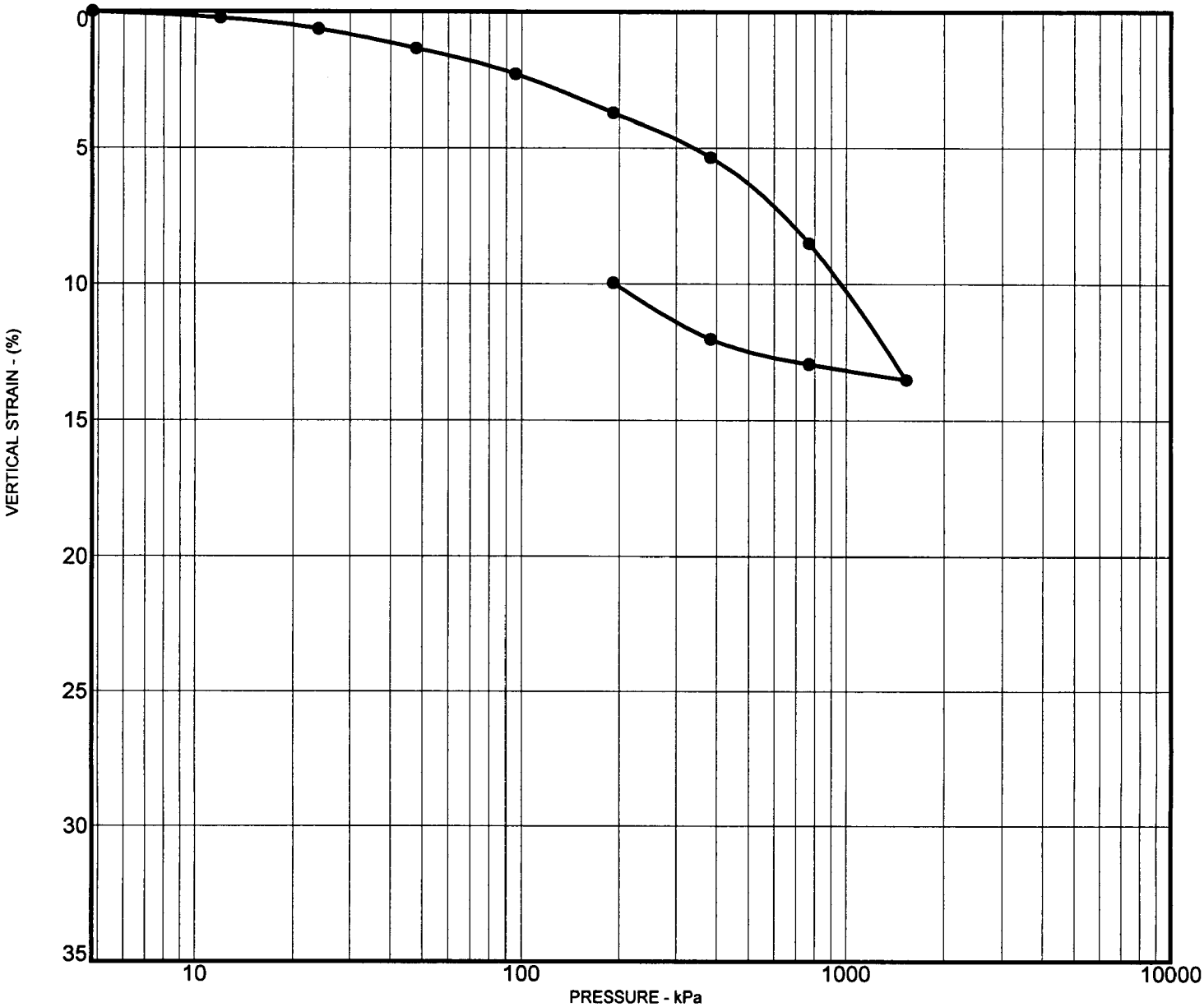
Boring Number:	SB-10-303
Sample Depth:	12.2 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	192.0	
Ring Weight	45.9	
Wet Wt.	146.1	
Wet + Tare		194
Dry + Tare		164.7
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/03/00	14:55:00			0209	
	19:00:00		4.8	0250	0.41
02/04/00	7:30:00		12.0	0298	0.89
	14:50:00		23.9	0356	1.47
02/05/00	8:30:00		47.9	0443	2.34
	17:50:00		95.8	0544	3.35
02/06/00	15:45:00		191.5	0723	5.14
02/07/00	14:05:00		383.0	1035	8.26
02/08/00	16:35:00		766.1	1425	12.16
	19:00:00		383.0	1393	11.84
02/09/00	7:40:00		191.5	1346	11.37
	13:15:00		47.9	1225	10.16



Sample	**SB-10-303**
Depth	**28.96 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**13.3**	**14.8**
Water content, %	**36.7**	**31.0**
Sample height, mm	**25.4**	**22.9**

KLEINFELDER

PROJECT NO. **35-8163-05**

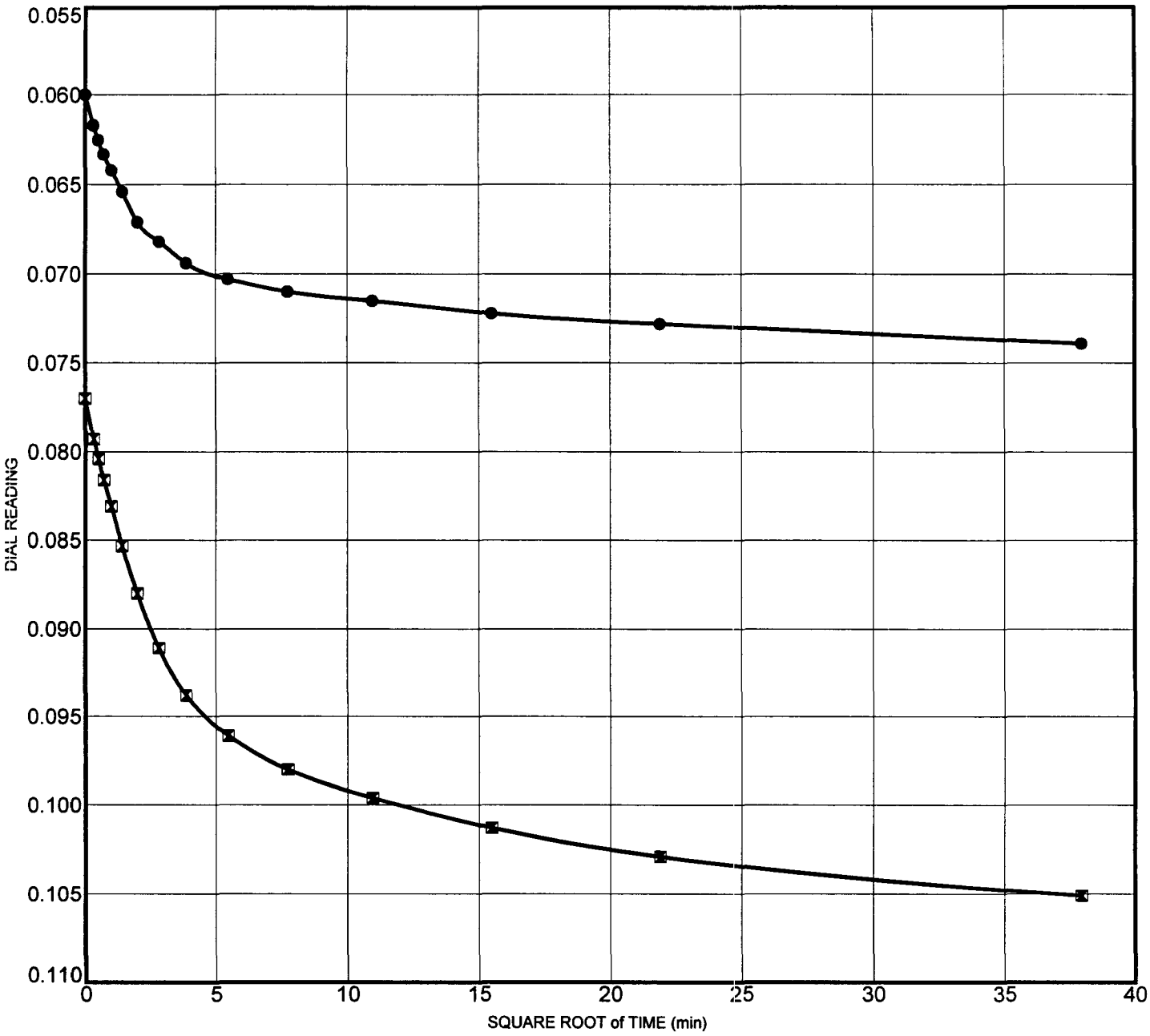
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-260



Sample	**SB-10-303**	
Depth	**29.0 m**	
Pressure (MPa)	● **0.38**	⊠ **0.77**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-261

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-10-303
Sample Depth:	29.0 m

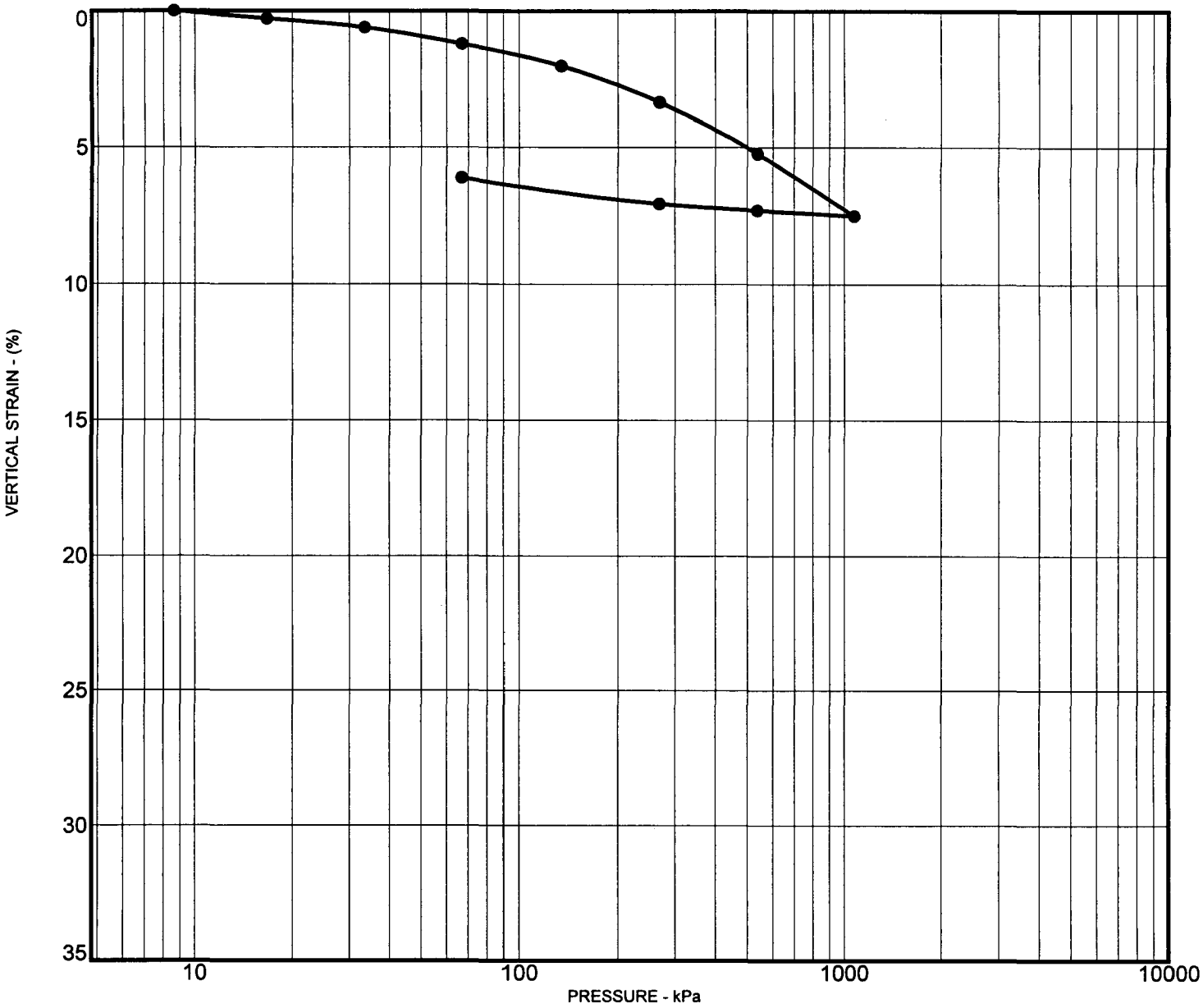
	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.6	
Ring Weight	45.1	
Wet Wt.	137.5	
Wet + Tare		185.5
Dry + Tare		154.3
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	23.2
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/03/00	15:45:00			0203	
	19:00:00		4.8	0204	0.01
	7:30:00		12.0	0228	0.25
	14:50:00		23.9	0268	0.65
	8:30:00		47.9	0340	1.37
	17:50:00		95.8	0434	2.31
	8:00:00		191.5	0576	3.73
	8:15:00	0:00:00	383.0	0600	3.97
	8:15:06	0:00:06		0617	
	8:15:15	0:00:15		0625	
	8:15:30	0:00:30		0633	
	8:16:00	0:01:00		0642	
	8:17:00	0:02:00		0654	
	8:19:00	0:04:00		0671	
	8:23:00	0:08:00		0682	
	8:30:00	0:15:00		0694	
	8:45:00	0:30:00		0703	
	9:15:00	1:00:00		0710	
	10:15:00	2:00:00		0715	
	12:15:00	4:00:00		0722	
	16:15:00	8:00:00		0728	
02/09/00	8:15:00	24:00:00	383.0	0739	5.36
	8:15:00	0:00:00	766.1	0770	5.67
	8:15:06	0:00:06		0793	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	8:15:15	0:00:15		0804	
	8:15:30	0:00:30		0816	
	8:16:00	0:01:00		0831	
	8:17:00	0:02:00		0853	
	8:19:00	0:04:00		0880	
	8:23:00	0:08:00		0911	
	8:30:00	0:15:00		0938	
	8:45:00	0:30:00		0961	
	9:15:00	1:00:00		0980	
	10:15:00	2:00:00		0996	
	12:15:00	4:00:00		1013	
	16:15:00	8:00:00		1029	
02/10/00	8:15:00	24:00:00		1051	
	11:30:00	27:15:00	766.1	1054	8.51
02/11/00	7:45:00		1532.2	1555	13.52
02/12/00	7:55:00		766.1	1498	12.95
02/13/00	8:10:00		383.0	1407	12.04
02/14/00	7:00:00		191.5	1200	9.97



Sample	SB-11-259
Depth	8.84 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	14.2	15.1
Water content, %	31.2	28.9
Sample height, mm	25.4	23.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-264

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

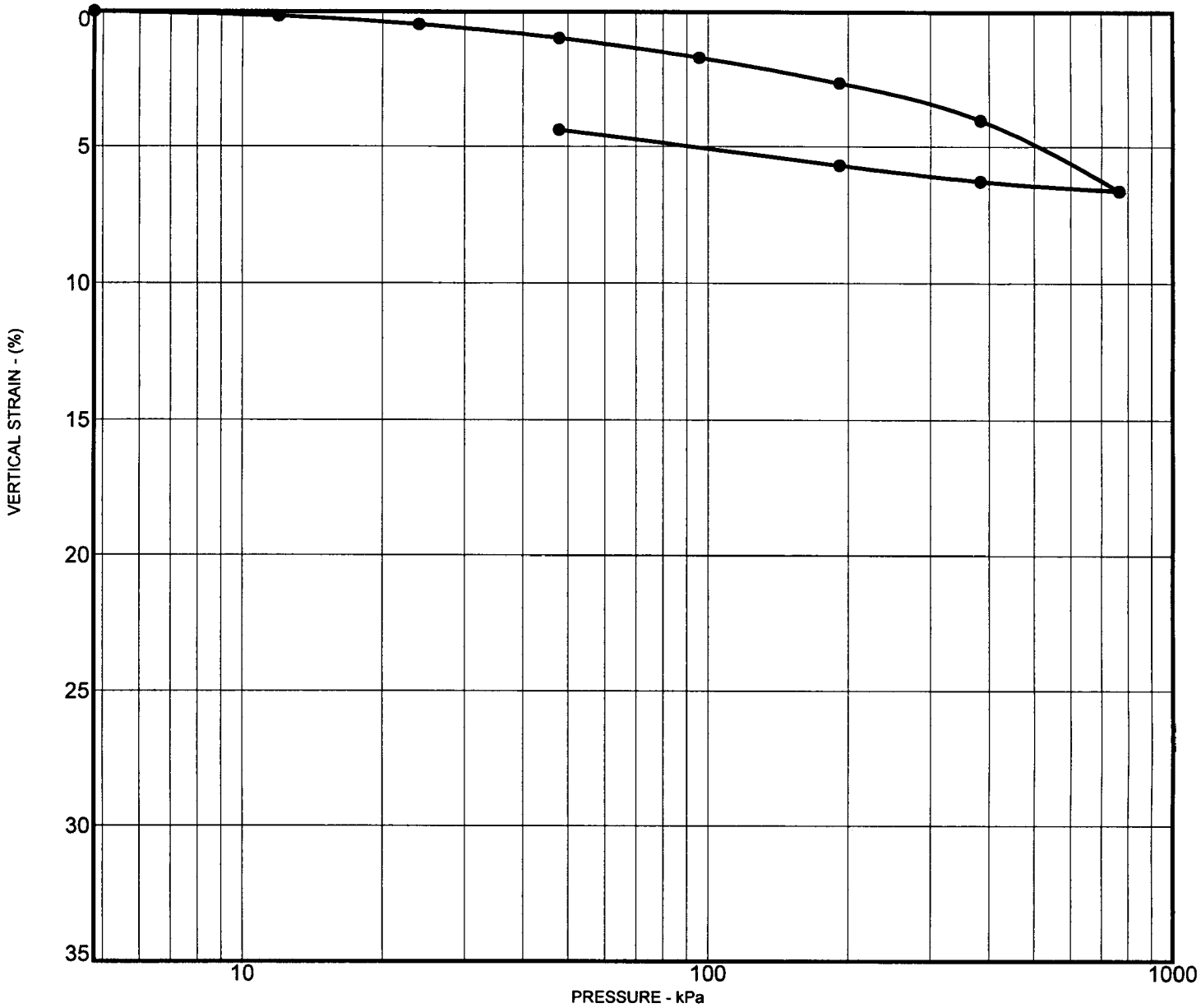
Boring Number:	SB-11-259
Sample Depth:	8.8 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	186.0	
Ring Weight	45.5	
Wet Wt.	140.5	
Wet + Tare		191.9
Dry + Tare		161
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.7
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/15/00	13:45:00			0100	
	15:50:00		8.6	0135	0.35
03/16/00	7:40:00		16.8	0164	0.64
	11:45:00		33.5	0197	0.97
03/17/00	10:30:00		67.0	0257	1.57
03/18/00	9:30:00		134.5	0339	2.39
03/19/00	9:50:00		268.6	0472	3.72
03/20/00	10:00:00		537.7	0658	5.58
03/21/00	12:10:00		1075.4	0885	7.85
	18:00:00		537.7	0865	7.65
	21:00:00		268.6	0841	7.41
03/22/00	8:00:00		67.0	0746	6.46



Sample	SB-11-259
Depth	27.13 m
Classification	SC

	Initial	Final
Dry density, kN/m^3	15.1	15.7
Water content, %	28.9	27.3
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

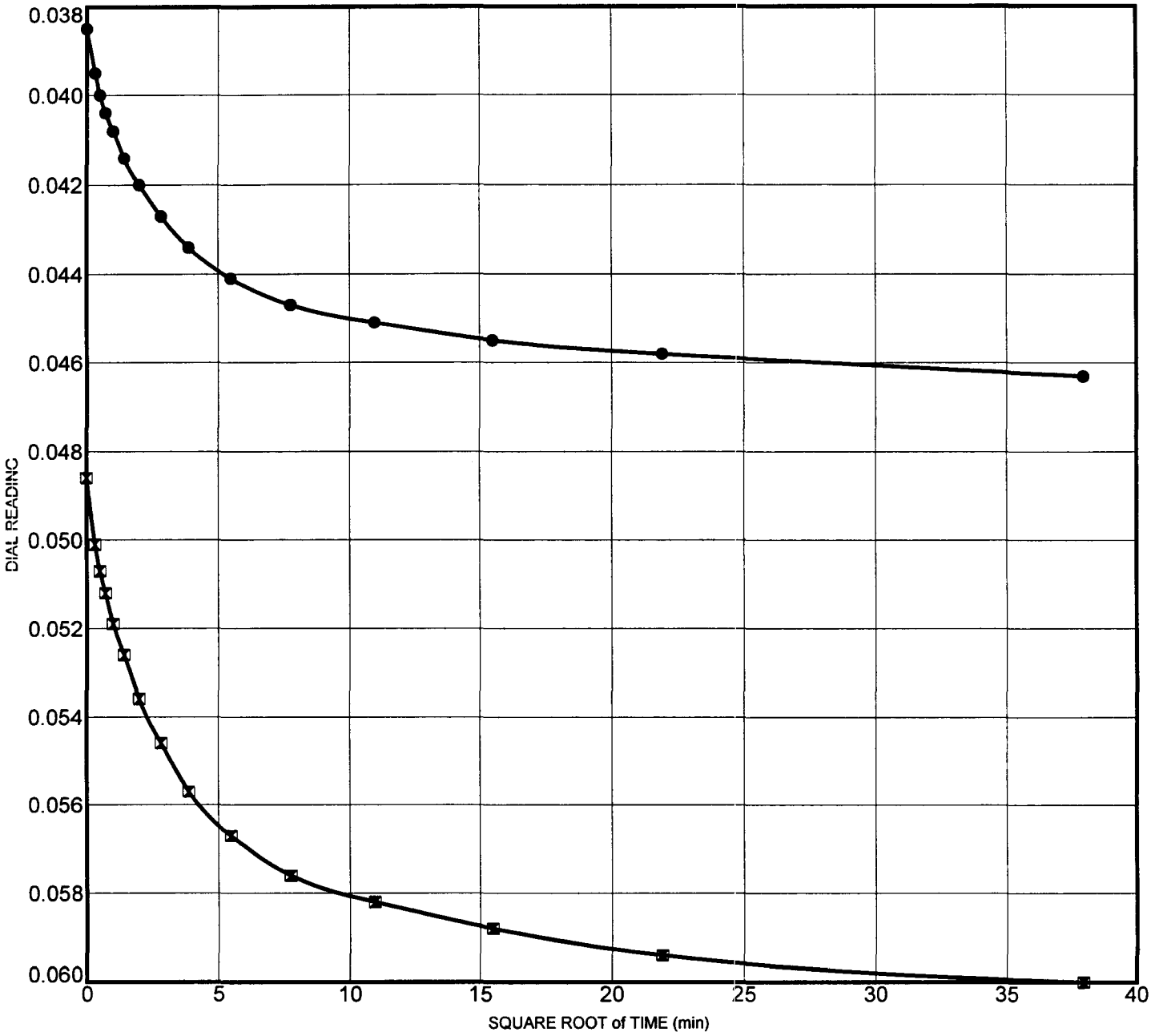
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-266



Sample	**SB-11-259**	
Depth	**27.1 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-267

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-11-259
Sample Depth:	27.1 m

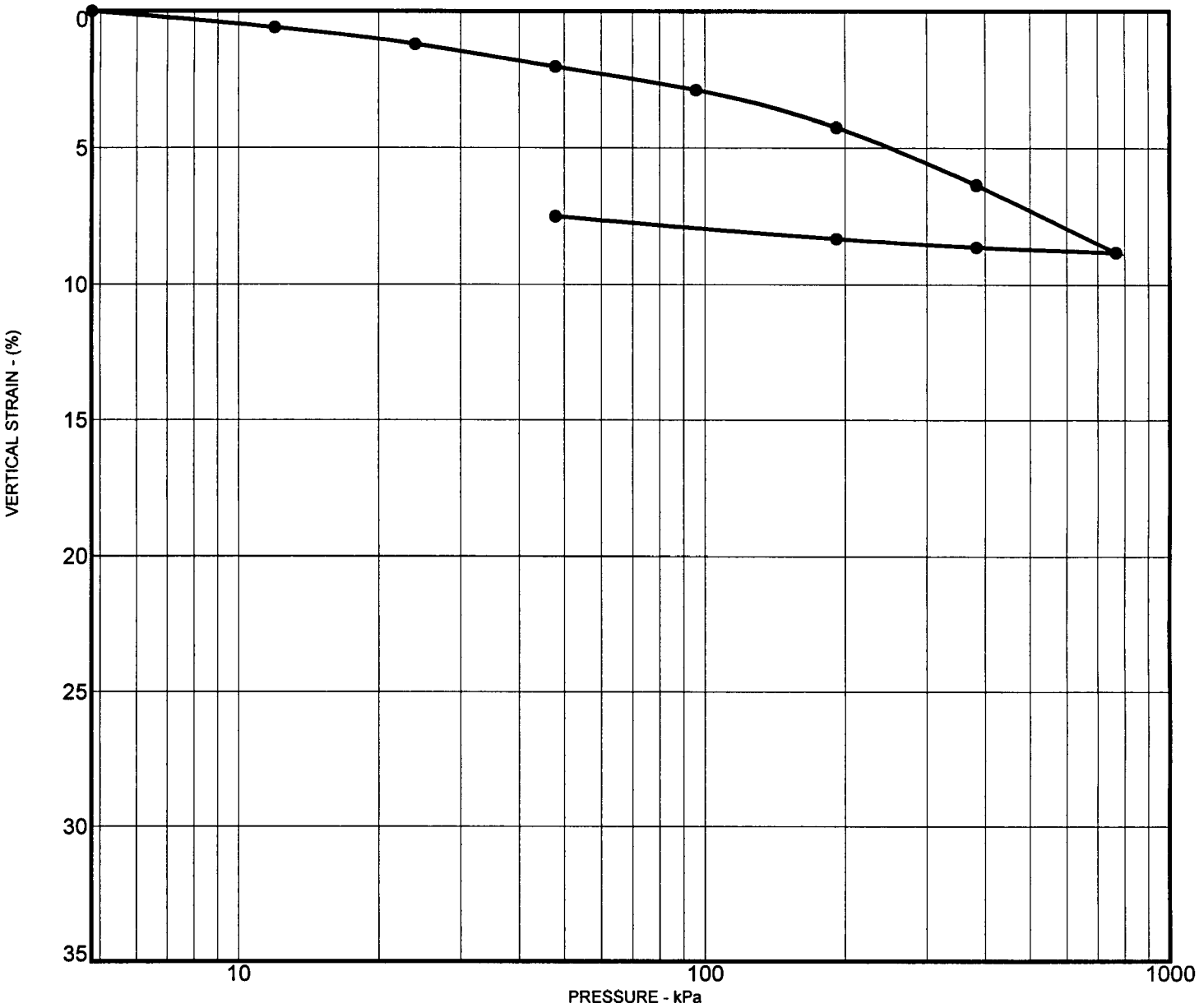
	Before Test (g)	After Test (g)
Wet Wt. + Ring	192.2	
Ring Weight	45.4	
Wet Wt.	146.8	
Wet + Tare		198.7
Dry + Tare		167.6
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	23.7
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/21/00	14:30:00			0199	
	15:30:00		4.8	0196	-0.03
	17:20:00		12.0	0213	0.14
	21:00:00		23.9	0244	0.45
	8:15:00		47.9	0295	0.96
03/24/00	8:00:00		95.8	0369	1.70
	8:06:00	0:00:00	191.5	0385	
	8:06:06	0:00:06		0395	
	8:06:15	0:00:15		0400	
	8:06:30	0:00:30		0404	
	8:07:00	0:01:00		0408	
	8:08:00	0:02:00		0414	
	8:10:00	0:04:00		0420	
	8:14:00	0:08:00		0427	
	8:21:00	0:15:00		0434	
	8:36:00	0:30:00		0441	
	9:06:00	1:00:00		0447	
	10:06:00	2:00:00		0451	
	12:06:00	4:00:00		0455	
	16:06:00	8:00:00		0458	
03/25/00	8:06:00	24:00:00	191.5	0463	2.64
	9:06:00	0:00:00	383.0	0486	2.87
	9:06:06	0:00:06		0501	
	9:06:15	0:00:15		0507	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	9:06:30	0:00:30		0512	
	9:07:00	0:01:00		0519	
	9:08:00	0:02:00		0526	
	9:10:00	0:04:00		0536	
	9:14:00	0:08:00		0546	
	9:21:00	0:15:00		0557	
	9:36:00	0:30:00		0567	
	10:06:00	1:00:00		0576	
	11:06:00	2:00:00		0582	
	13:06:00	4:00:00		0588	
	17:06:00	8:00:00		0594	
03/26/00	9:06:00	24:00:00	383.0	0600	4.01
03/27/00	14:35:00		766.1	0857	6.58
	19:30:00		383.0	0823	6.24
03/28/00	8:15:00		191.5	0765	5.66
	13:40:00		47.9	0635	4.36



Sample	SB-11-262
Depth	7.62 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.9	16.1
Water content, %	28.5	25.3
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-270

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

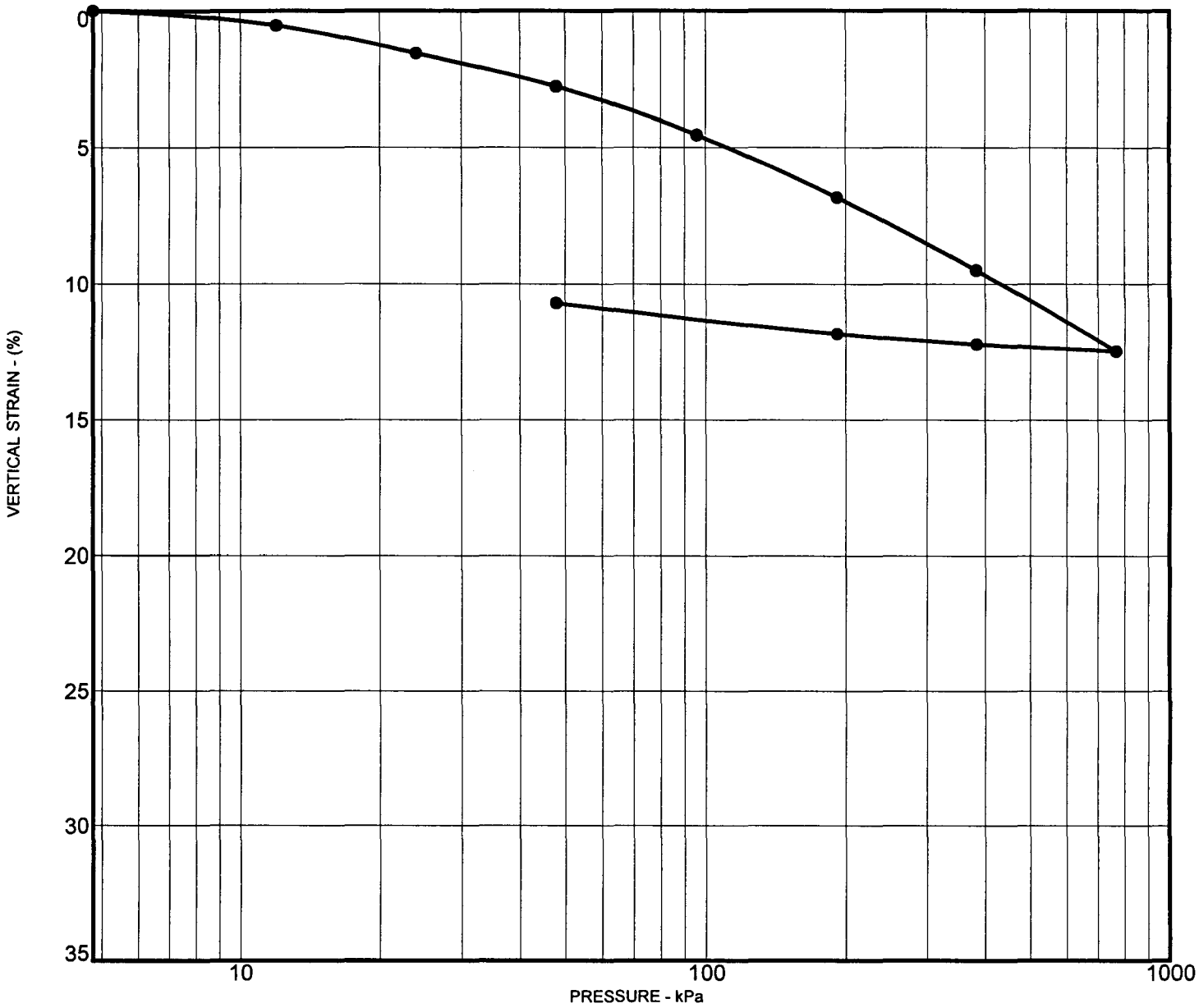
Boring Number:	SB-11-262
Sample Depth:	7.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	189.7	
Ring Weight	45	
Wet Wt.	144.7	
Wet + Tare		194.5
Dry + Tare		166
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/15/00	8:10:00			0215	
	11:00:00		4.8	0263	0.48
	14:55:00		12.0	0323	1.08
	18:20:00		23.9	0385	1.70
02/16/00	7:30:00		47.9	0468	2.53
	13:05:00		95.8	0555	3.40
	19:00:00		191.5	0690	4.75
02/17/00	15:15:00		383.0	0899	6.84
02/18/00	13:00:00		766.1	1144	9.29
	17:10:00		383.0	1125	9.10
02/19/00	11:00:00		191.5	1094	8.79
	17:30:00		47.9	1013	7.98



Sample	SB-11-262
Depth	16.76 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	13.9	15.5
Water content, %	35.0	27.7
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-272

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

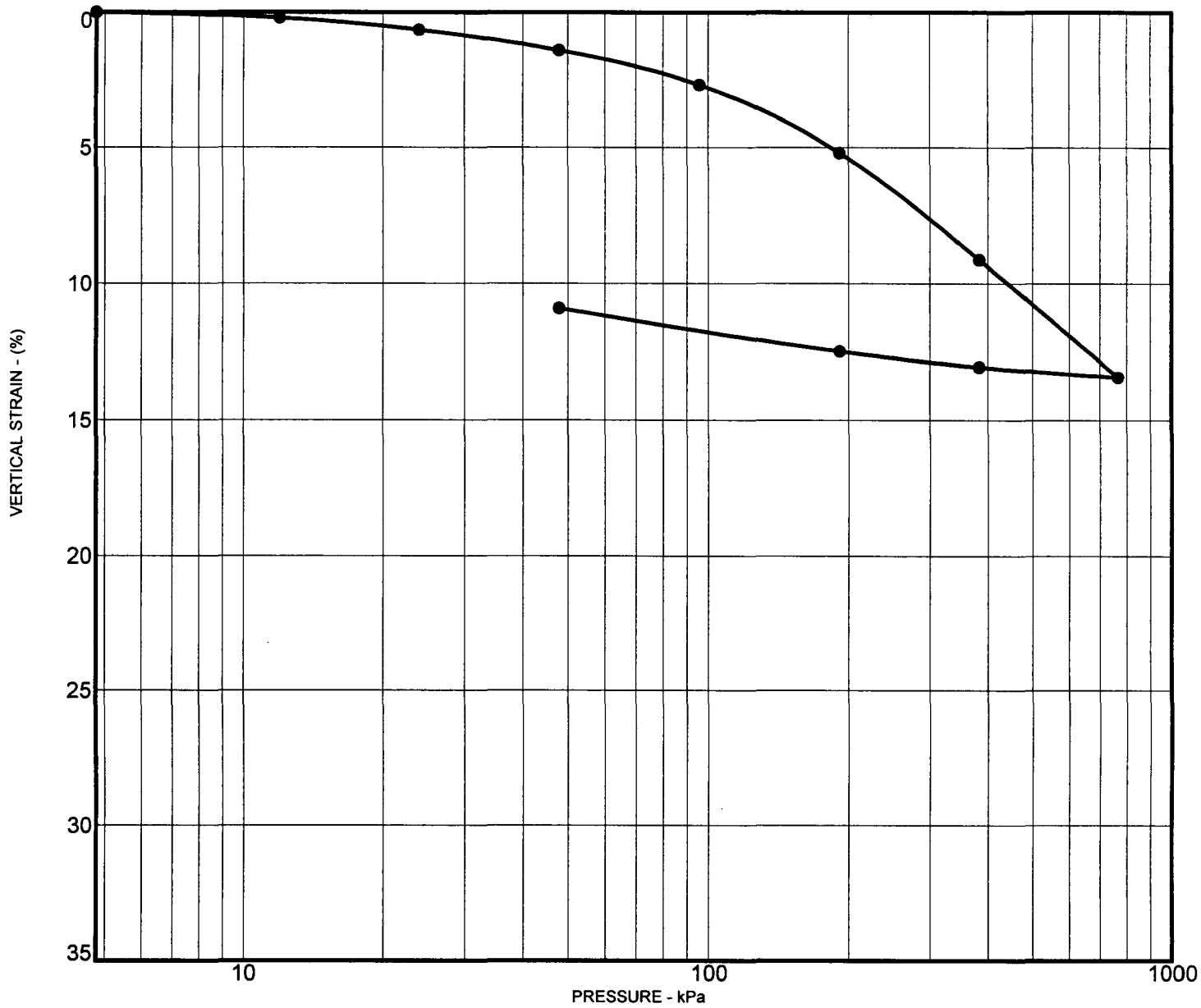
Boring Number:	SB-11-262
Sample Depth:	16.8 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	186.9	
Ring Weight	45.2	
Wet Wt.	141.7	
Wet + Tare		187.9
Dry + Tare		158.8
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	26.4
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/15/00	8:30:00			0408	
	11:00:00		4.8	0435	0.27
	17:25:00		12.0	0498	0.90
02/16/00	7:30:00		23.9	0593	1.85
	17:35:00		47.9	0715	3.07
02/17/00	7:40:00		95.8	0890	4.82
02/18/00	8:30:00		191.5	1118	7.10
02/19/00	11:00:00		383.0	1384	9.76
02/20/00	8:40:00		766.1	1682	12.74
	17:15:00		383.0	1657	12.49
02/21/00	8:20:00		191.5	1618	12.10
	14:30:00		47.9	1505	10.97



Sample	SB-12-263
Depth	5.18 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.9	15.6
Water content, %	33.2	27.1
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-274

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

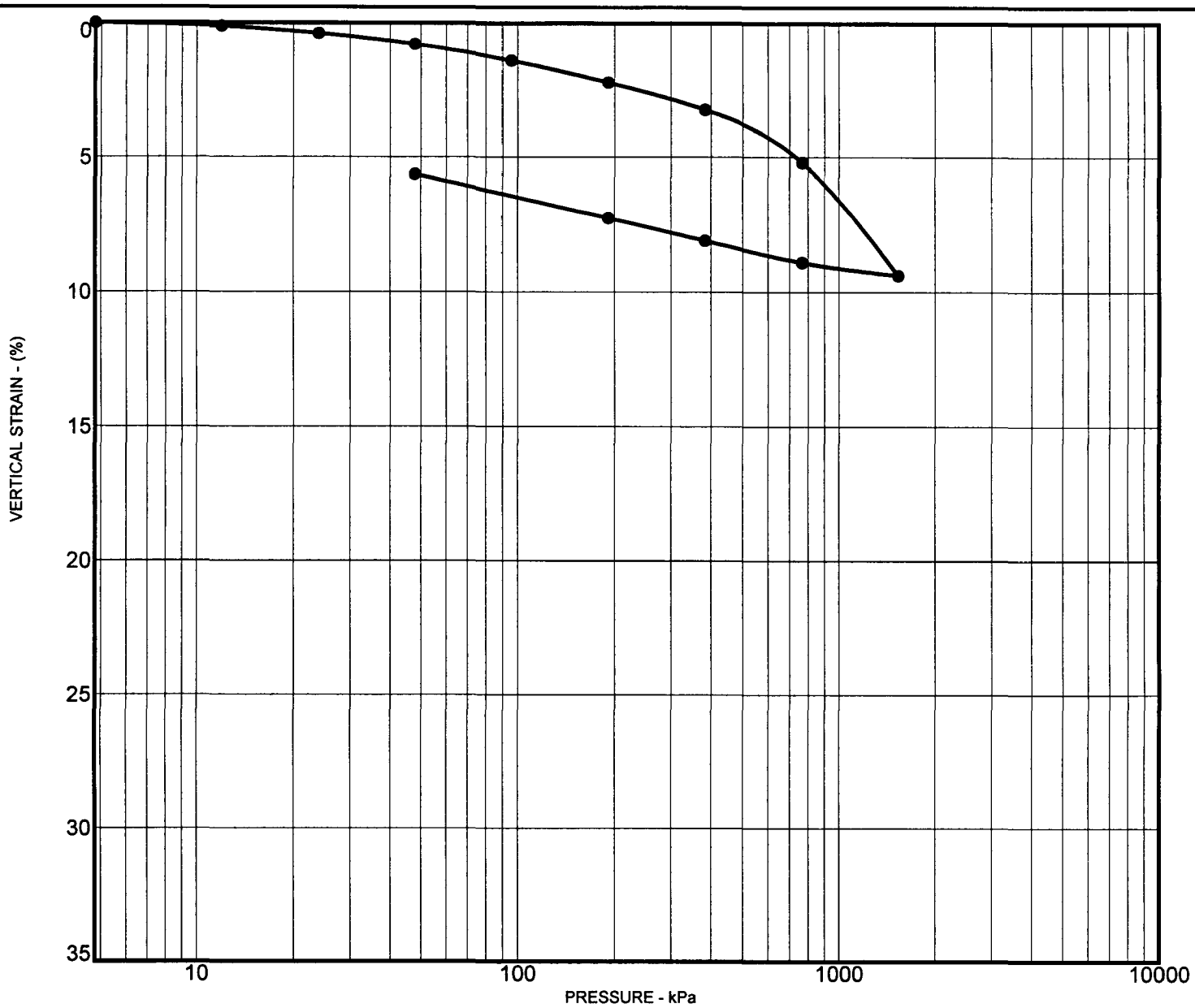
Boring Number:	SB-12-263
Sample Depth:	5.2 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	185.7	
Ring Weight	45.4	
Wet Wt.	140.3	
Wet + Tare		187.7
Dry + Tare		159.2
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/15/00	8:25:00			0199	
	15:40:00		4.8	0209	0.10
	19:30:00		12.0	0230	0.31
03/16/00	7:50:00		23.9	0275	0.76
	11:55:00		47.9	0351	1.52
	18:00:00		95.8	0480	2.81
03/18/00	9:30:00		191.5	0730	5.31
03/19/00	10:00:00		383.0	1121	9.22
03/20/00	13:35:00		766.1	1551	13.52
	19:50:00		383.0	1514	13.15
03/21/00	7:40:00		191.5	1457	12.58
	14:00:00		47.9	1300	11.01



Sample	SB-12-263
Depth	41.15 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	15.1	16.4
Water content, %	28.1	26.4
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-276

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

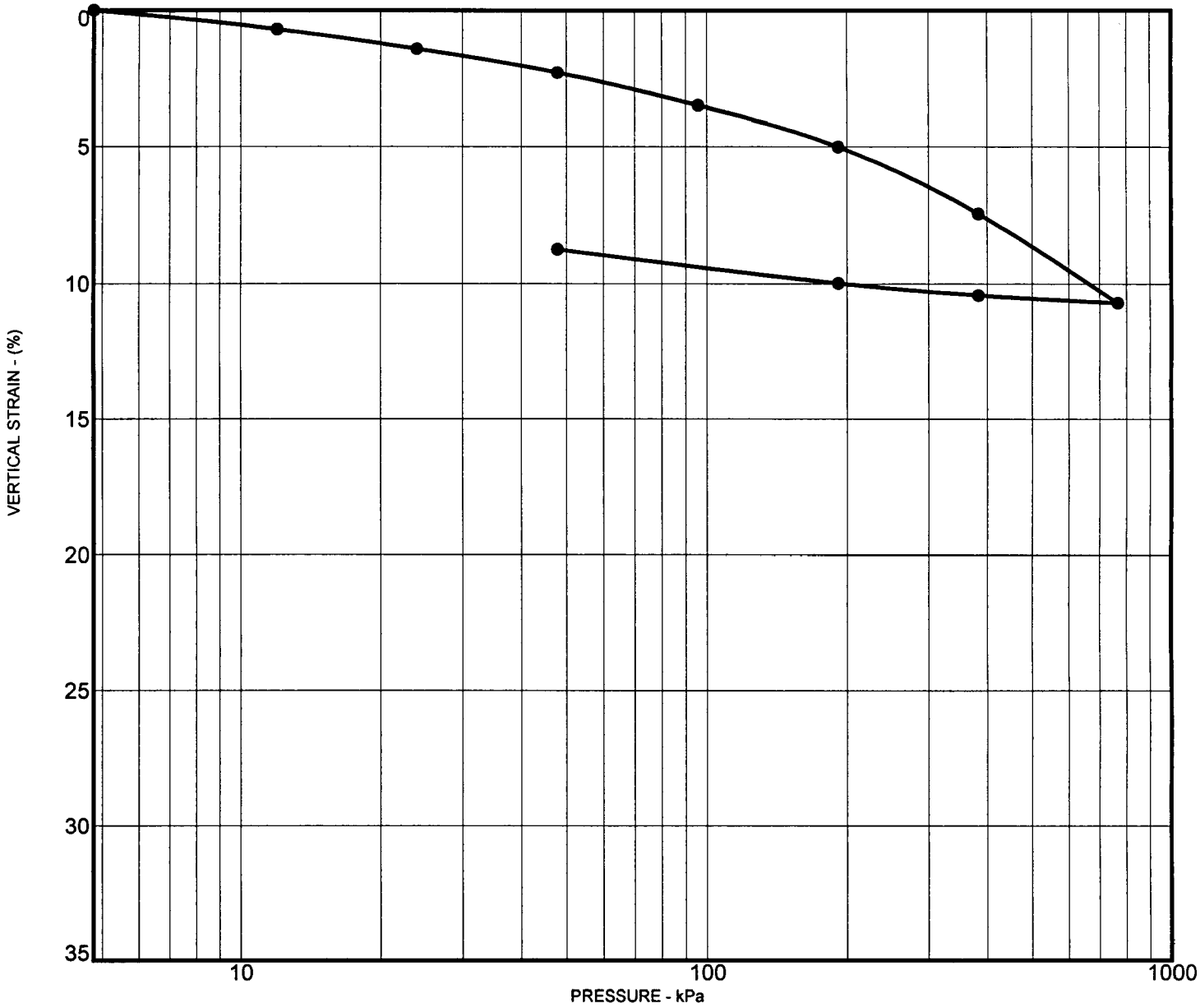
Boring Number:	SB-12-263
Sample Depth:	41.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	191.8	
Ring Weight	45.1	
Wet Wt.	146.7	
Wet + Tare		198.4
Dry + Tare		168.2
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	26.2
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/15/00	9:20:00			0305	
	15:40:00		4.8	0252	-0.53
	19:30:00		12.0	0265	-0.40
03/16/00	7:45:00		23.9	0292	-0.13
	11:55:00		47.9	0333	0.28
	18:00:00		95.8	0395	0.90
03/17/00	10:20:00		191.5	0478	1.73
03/18/00	9:30:00		383.0	0579	2.74
03/19/00	10:00:00		766.1	0772	4.67
03/20/00	17:20:00		1532.2	1190	8.85
	19:50:00		766.1	1142	8.37
03/21/00	7:40:00		383.0	1061	7.56
	13:15:00		191.5	0977	6.72
	17:20:00		47.9	0815	5.10



Sample	SB-12-265
Depth	4.57 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.0	16.4
Water content, %	28.7	25.3
Sample height, mm	25.4	23.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-278

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

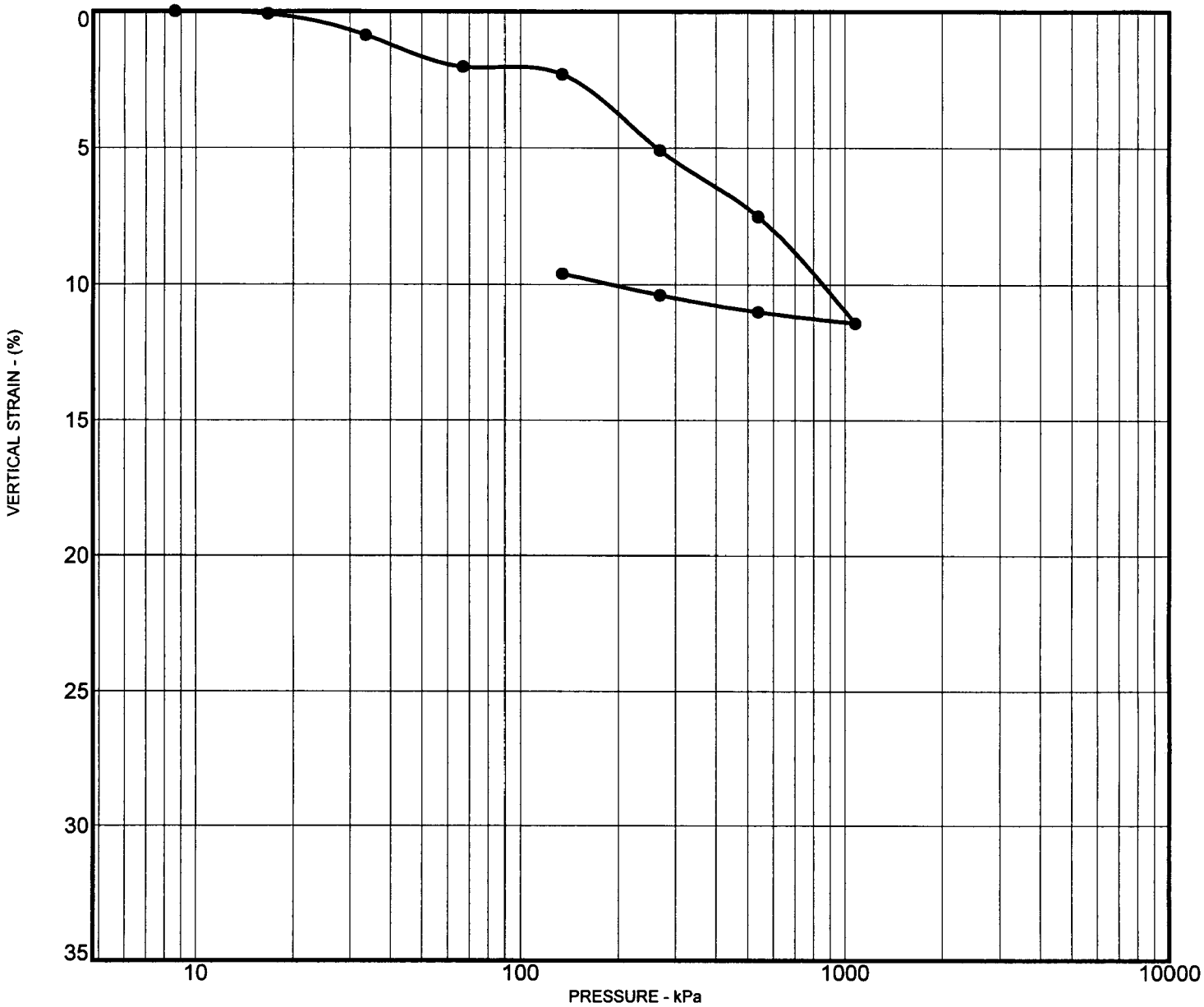
Boring Number:	SB-12-265
Sample Depth:	4.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	191.1	
Ring Weight	45	
Wet Wt.	146.1	
Wet + Tare		195.6
Dry + Tare		166.9
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/28/00	12:20:00			0193	
	15:30:00		4.8	0206	0.13
	19:00:00		12.0	0276	0.83
02/29/00	1:00:00		23.9	0349	1.56
	15:50:00		47.9	0437	2.44
03/01/00	7:50:00		95.8	0556	3.63
	18:10:00		191.5	0707	5.14
03/02/00	17:25:00		383.0	0951	7.58
03/03/00	13:50:00		766.1	1276	10.83
03/04/00	9:45:00		383.0	1248	10.55
	12:00:00		191.5	1204	10.11
	17:45:00		47.9	1081	8.88



Sample	SB-12-265
Depth	30.48 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.5	17.1
Water content, %	27.9	24.1
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-280

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

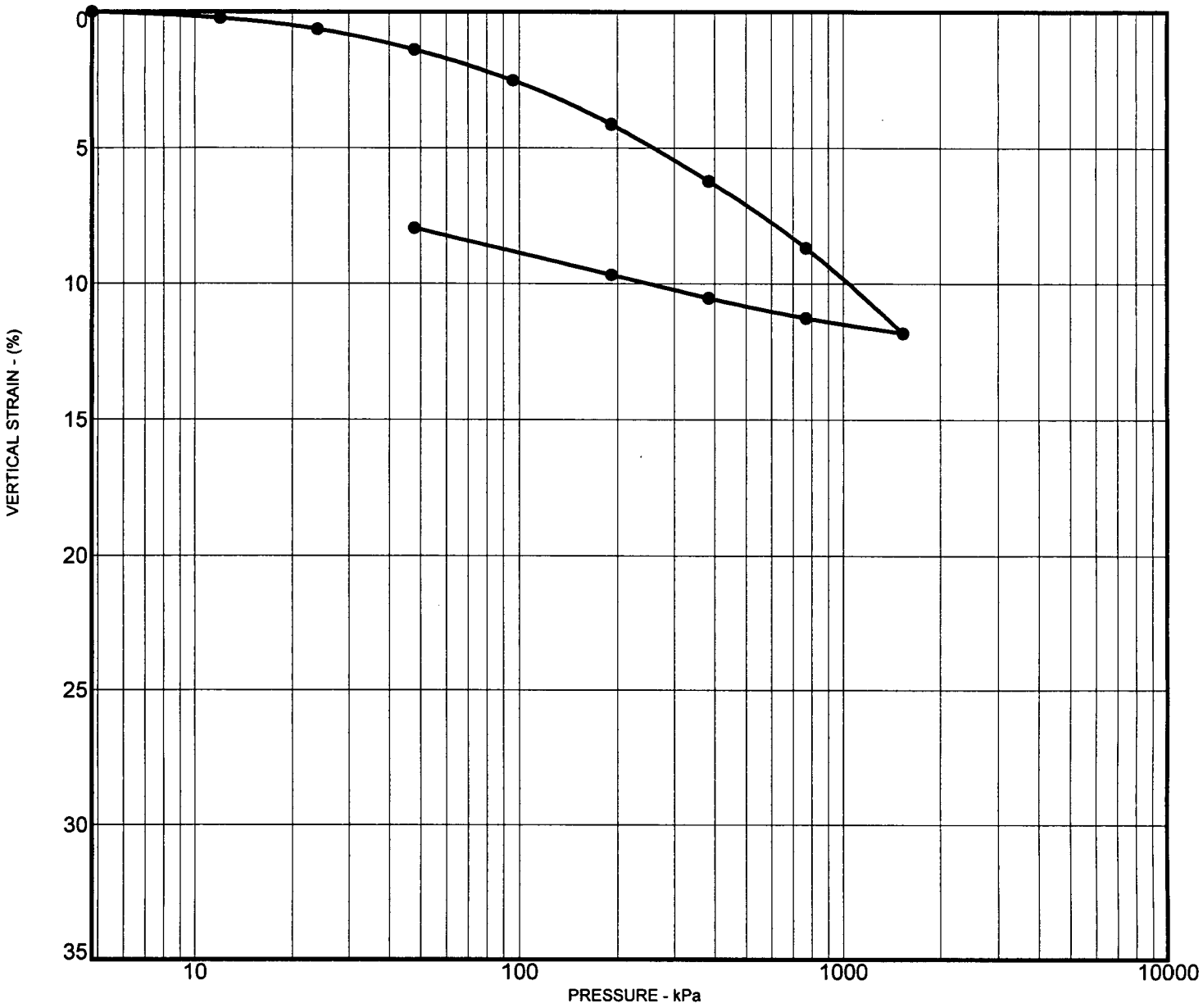
Boring Number:	SB-12-265
Sample Depth:	30.5 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	195.4	
Ring Weight	45.7	
Wet Wt.	149.7	
Wet + Tare		199
Dry + Tare		170.8
Tare Wt.		8.1

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/03/00	15:00:00			0191	
03/04/00	9:40:00		8.6	0165	-0.26
	12:00:00		16.8	0174	-0.17
	17:45:00		33.5	0254	0.63
03/05/00	17:40:00		67.0	0371	1.80
03/06/00	8:15:00		134.5	0399	2.08
03/07/00	7:50:00		268.6	0674	4.83
	21:00:00		537.7	0916	7.25
03/08/00	19:00:00		1075.4	1308	11.17
03/09/00	17:50:00		537.7	1266	10.75
03/10/00	7:55:00		268.6	1203	10.12
	15:50:00		134.5	1125	9.34



Sample	SB-12-265
Depth	48.77 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	15.6	17.0
Water content, %	26.7	24.3
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-282

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

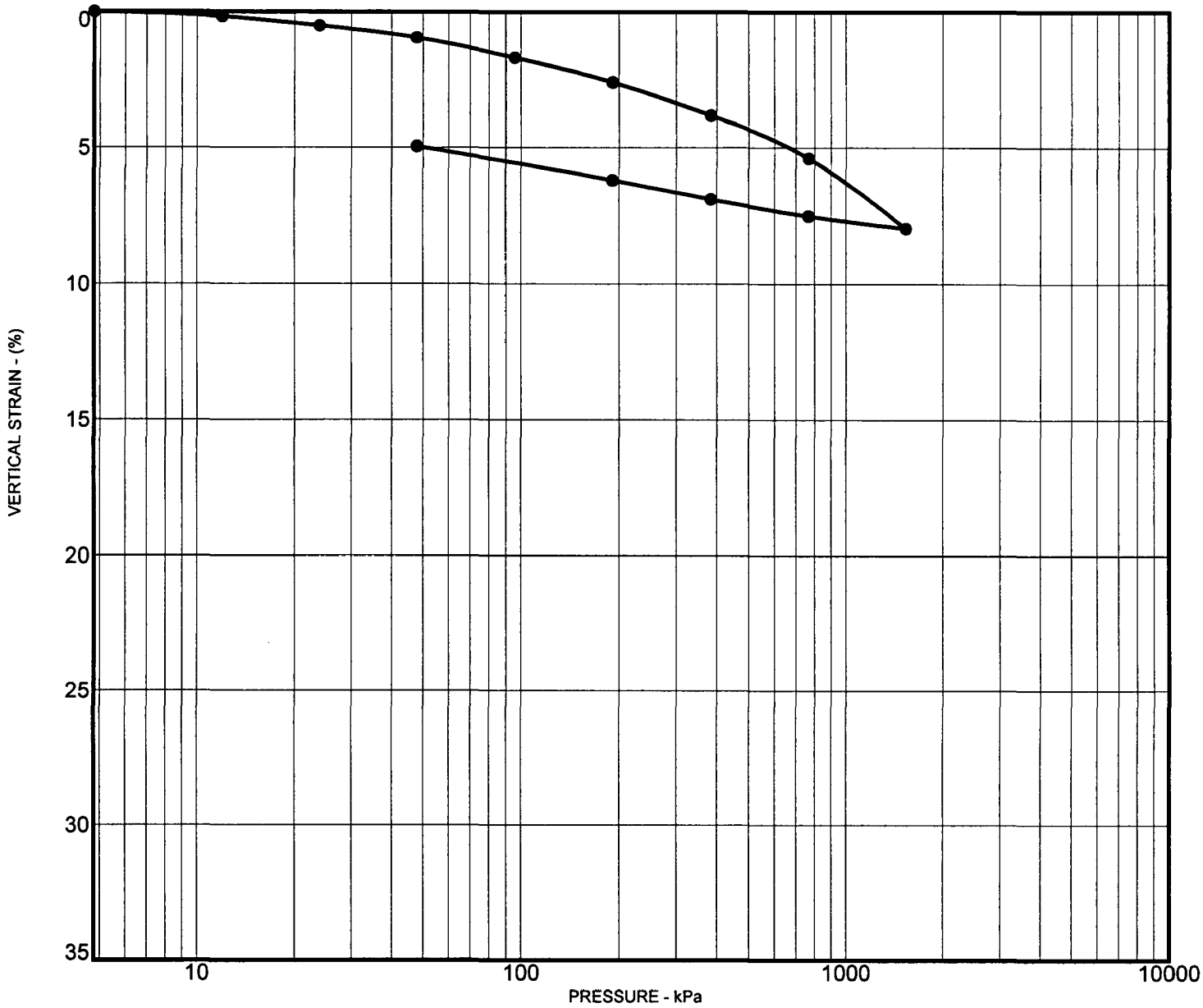
Boring Number:	SB-12-265
Sample Depth:	48.8 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	195.7	
Ring Weight	45.8	
Wet Wt.	149.9	
Wet + Tare		201.2
Dry + Tare		172.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/04/00	18:10:00			0201	
03/05/00	17:45:00		4.8	0192	-0.09
03/06/00	8:15:00		12.0	0215	0.14
	19:30:00		23.9	0256	0.55
03/07/00	7:55:00		47.9	0333	1.32
	17:45:00		95.8	0446	2.45
03/08/00	8:50:00		191.5	0607	4.06
03/09/00	17:50:00		383.0	0814	6.13
03/10/00	17:00:00		766.1	1060	8.59
03/11/00	18:00:00		1532.2	1373	11.72
03/12/00	8:45:00		766.1	1318	11.17
	17:00:00		383.0	1244	10.43
03/13/00	7:05:00		191.5	1159	9.58
	14:40:00		47.9	0986	7.85



Sample	**SB-12-265**
Depth	**73.15 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**16.1**	**17.0**
Water content, %	**23.5**	**23.3**
Sample height, mm	**25.4**	**24.1**

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-284

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

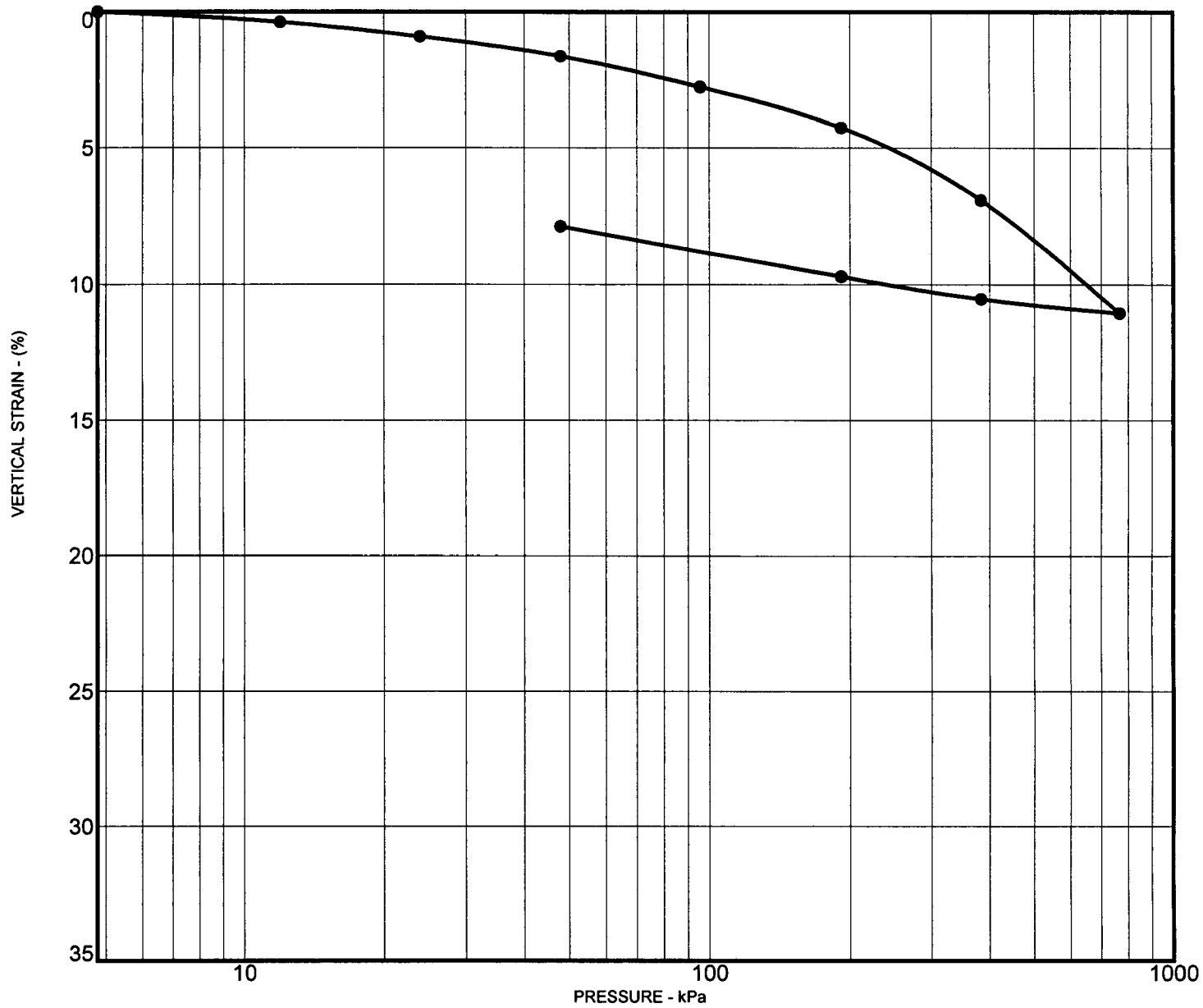
Boring Number:	SB-12-265
Sample Depth:	73.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	195.9	
Ring Weight	45.1	
Wet Wt.	150.8	
Wet + Tare		204
Dry + Tare		175.6
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/04/00	18:40:00			0205	
03/05/00	17:40:00		4.8	0154	-0.51
03/06/00	8:15:00		12.0	0172	-0.33
	19:30:00		23.9	0206	0.01
03/07/00	7:55:00		47.9	0251	0.46
	13:05:00		95.8	0325	1.20
	21:00:00		191.5	0416	2.11
03/08/00	19:20:00		383.0	0537	3.32
03/09/00	17:50:00		766.1	0693	4.88
03/10/00	17:00:00		1532.2	0951	7.46
03/11/00	10:00:00		766.1	0906	7.01
	18:00:00		383.0	0844	6.39
03/12/00	8:45:00		191.5	0774	5.69
	17:00:00		47.9	0650	4.45



Sample	SB-13-304
Depth	4.57 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.2	15.4
Water content, %	33.6	29.8
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-286

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

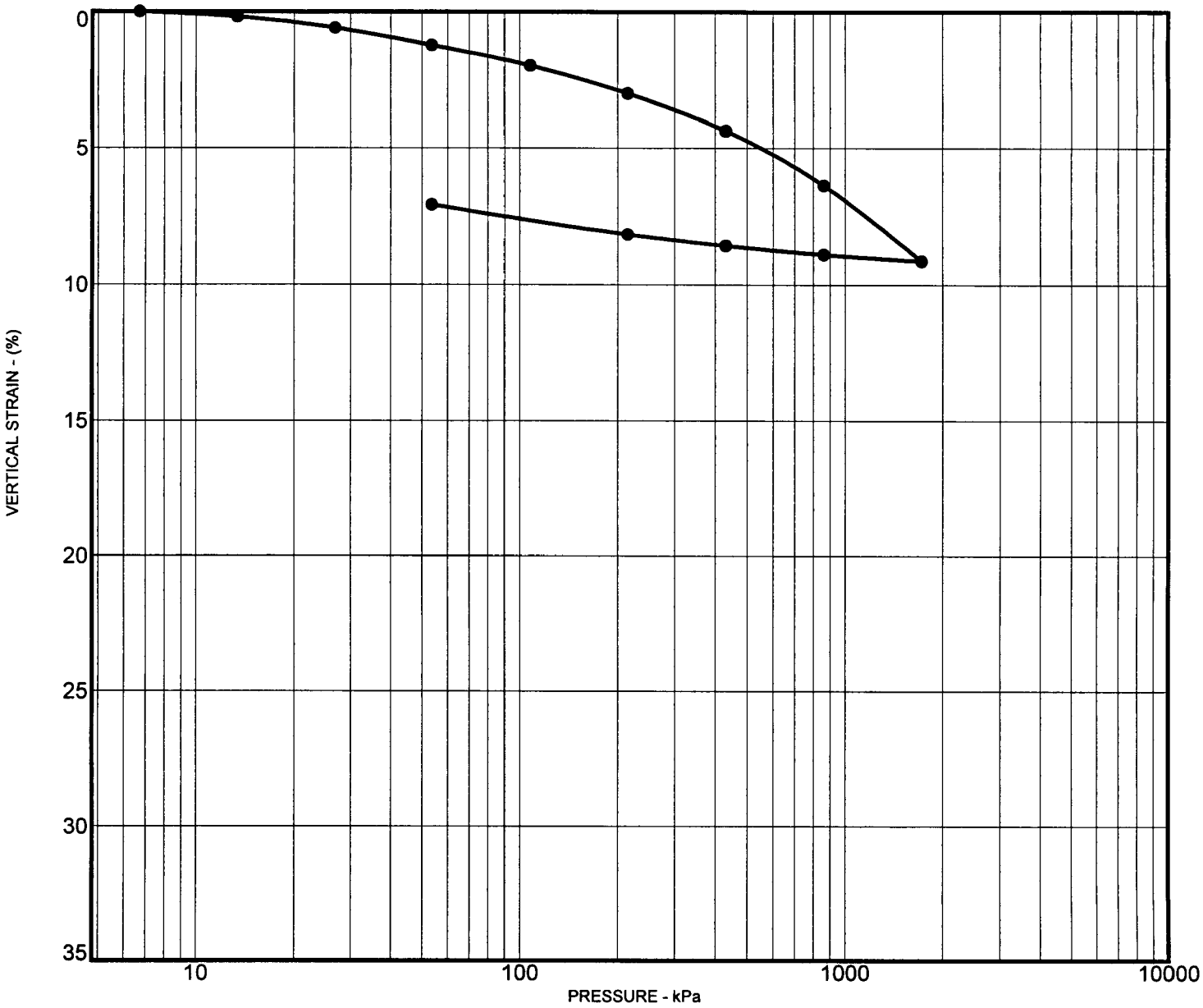
Boring Number:	SB-13-304
Sample Depth:	4.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	188.5	
Ring Weight	45.1	
Wet Wt.	143.4	
Wet + Tare		193
Dry + Tare		161
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/07/00	8:50:00			0202	
	11:40:00		4.8	0225	0.23
	17:45:00		12.0	0263	0.61
03/08/00	7:30:00		23.9	0317	1.15
	14:35:00		47.9	0390	1.88
03/10/00	8:05:00		95.8	0503	3.01
03/11/00	10:00:00		191.5	0651	4.49
03/12/00	8:45:00		383.0	0916	7.14
03/13/00	9:15:00		766.1	1330	11.28
	11:15:00		383.0	1278	10.76
	18:30:00		191.5	1196	9.94
03/14/00	7:30:00		47.9	1013	8.11



Sample	SB-13-304
Depth	27.43 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	16.0	17.2
Water content, %	25.2	24.9
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-288

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

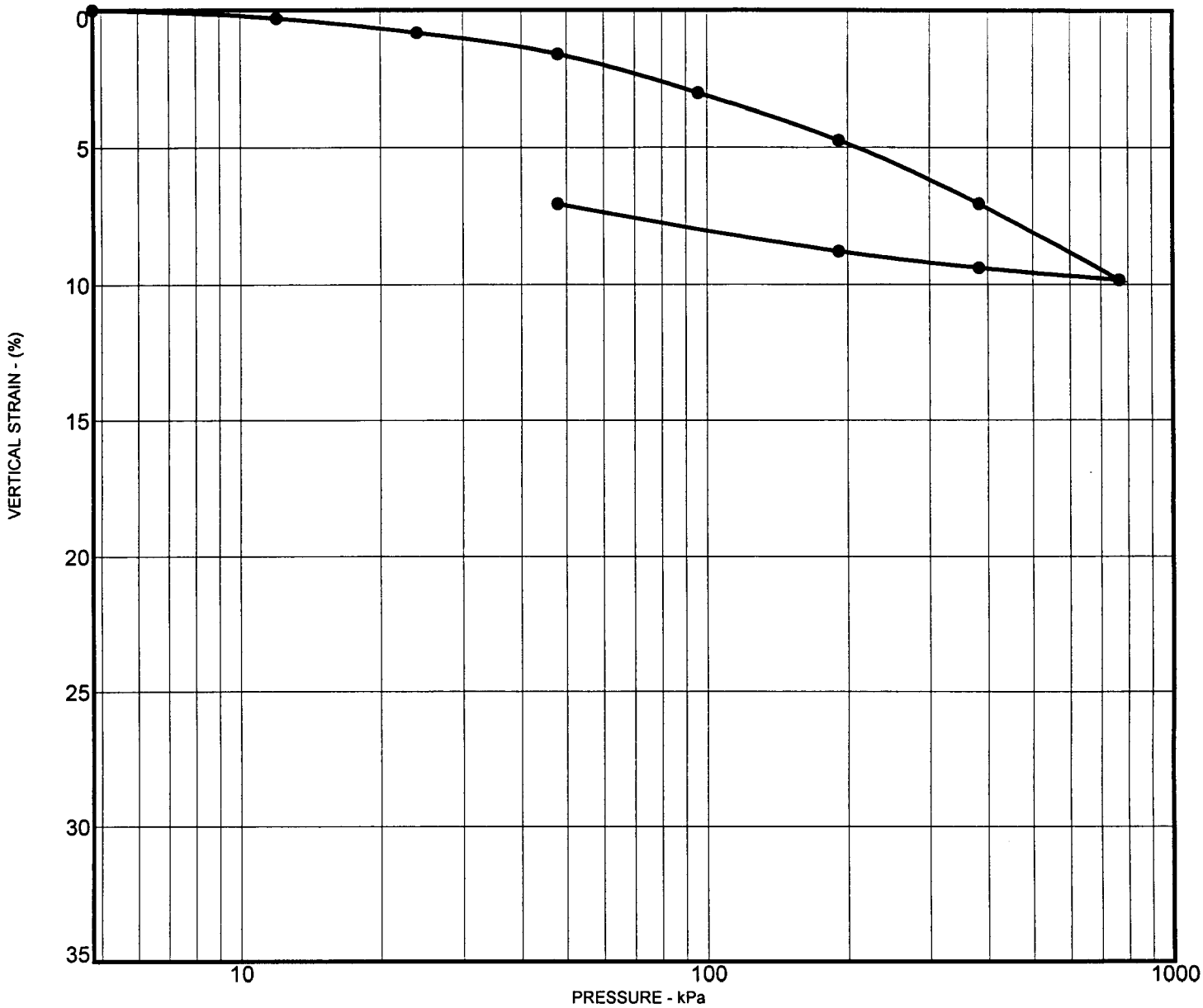
Boring Number:	SB-13-304
Sample Depth:	27.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	196.7	
Ring Weight	45.1	
Wet Wt.	151.6	
Wet + Tare		204.7
Dry + Tare		174.5
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/07/00	9:15:00			0209	
	12:45:00		6.7	0232	0.23
	16:00:00		13.4	0251	0.42
	21:00:00		26.8	0293	0.84
03/08/00	7:20:00		53.6	0357	1.48
	13:00:00		107.7	0432	2.23
03/09/00	17:50:00		215.0	0534	3.25
03/10/00	15:50:00		430.0	0670	4.61
03/11/00	18:00:00		859.9	0869	6.60
03/12/00	17:00:00		1720.3	1145	9.36
03/13/00	7:10:00		859.9	1121	9.12
	11:40:00		430.0	1089	8.80
	15:55:00		215.0	1048	8.39
03/14/00	7:50:00		53.6	0940	7.31



Sample	SB-13-308
Depth	1.52 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.6	16.8
Water content, %	25.6	23.7
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-290

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

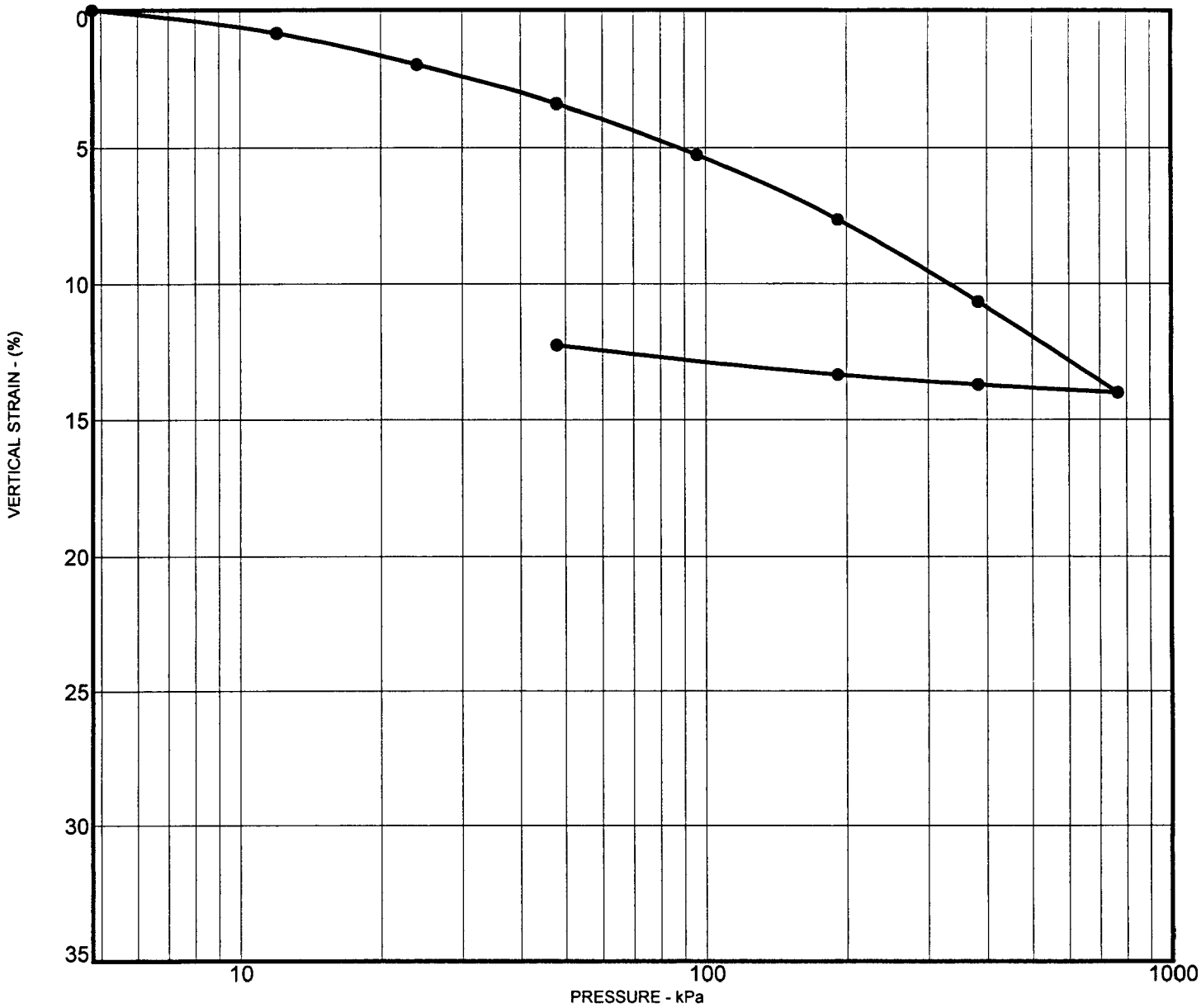
Boring Number:	SB-13-308
Sample Depth:	1.5 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	192.7	
Ring Weight	44.6	
Wet Wt.	148.1	
Wet + Tare		198.9
Dry + Tare		171
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.8
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/28/00	8:30:00			0172	
	12:00:00		4.8	0164	-0.08
	18:00:00		12.0	0194	0.22
01/29/00	10:00:00		23.9	0247	0.75
	16:50:00		47.9	0325	1.53
01/30/00	9:35:00		95.8	0462	2.90
01/31/00	8:50:00		191.5	0638	4.66
02/01/00	10:20:00		383.0	0868	6.96
	19:20:00		766.1	1147	9.75
02/02/00	9:40:00		383.0	1103	9.31
	15:30:00		191.5	1042	8.70
02/03/00	11:15:00		47.9	0868	6.96



Sample	**SB-13-308**
Depth	**18.29 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**16.2**	**18.4**
Water content, %	**22.6**	**20.3**
Sample height, mm	**25.4**	**22.4**

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-292

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

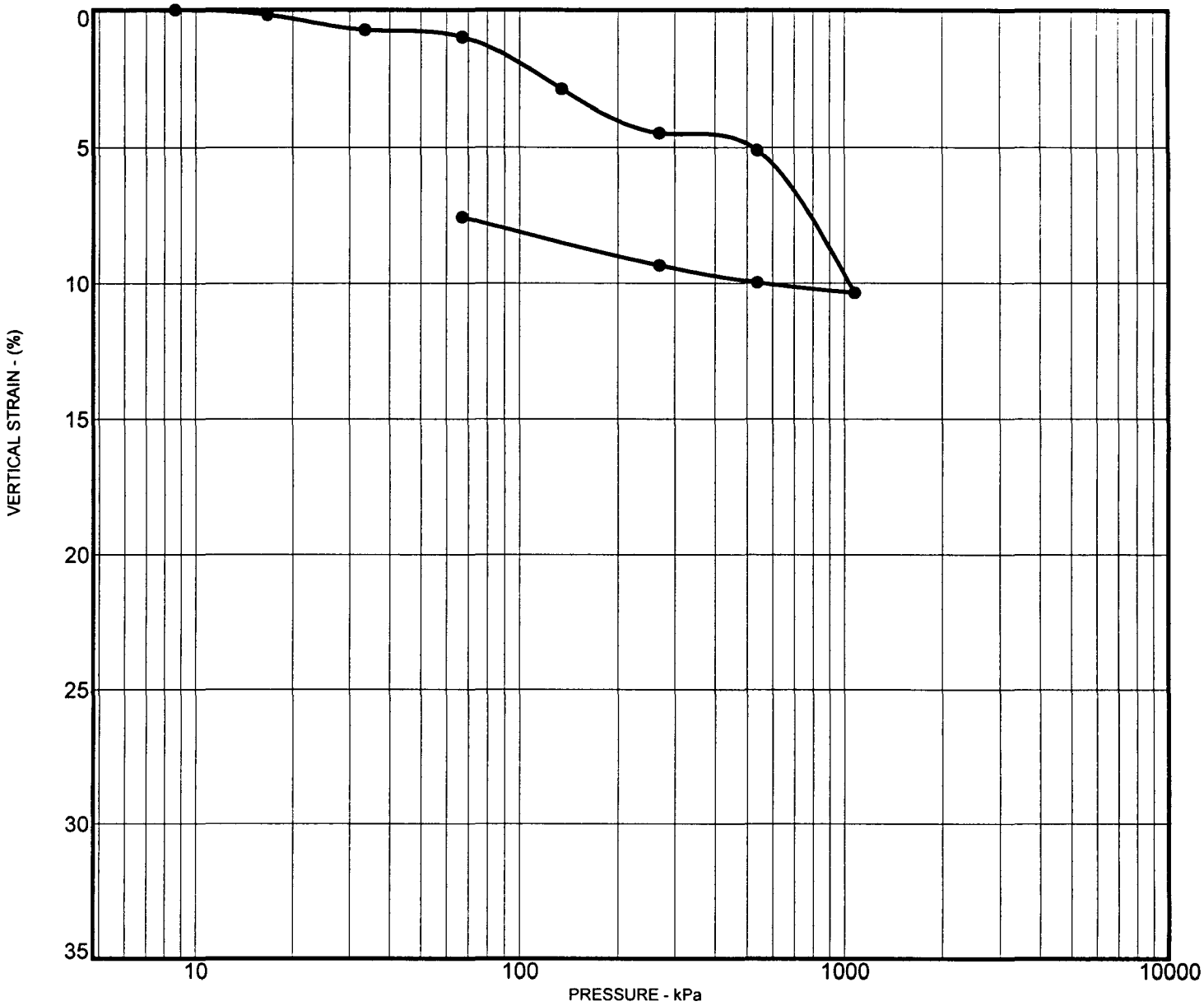
Boring Number:	SB-13-308
Sample Depth:	18.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	195.2	
Ring Weight	45.1	
Wet Wt.	150.1	
Wet + Tare		200.7
Dry + Tare		175.9
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.8
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/28/00	8:50:00			0175	
	12:00:00		4.8	0233	0.58
	18:00:00		12.0	0318	1.43
01/29/00	10:00:00		23.9	0432	2.57
	16:50:00		47.9	0574	3.99
01/30/00	9:35:00		95.8	0760	5.85
01/31/00	8:50:00		191.5	0997	8.22
02/01/00	10:20:00		383.0	1299	11.24
	19:20:00		766.1	1633	14.58
02/02/00	9:40:00		383.0	1604	14.29
	18:15:00		191.5	1567	13.92
02/03/00	11:20:00		47.9	1458	12.83



Sample	SB-14-309
Depth	4.27 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.4	15.6
Water content, %	30.6	27.5
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-294

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

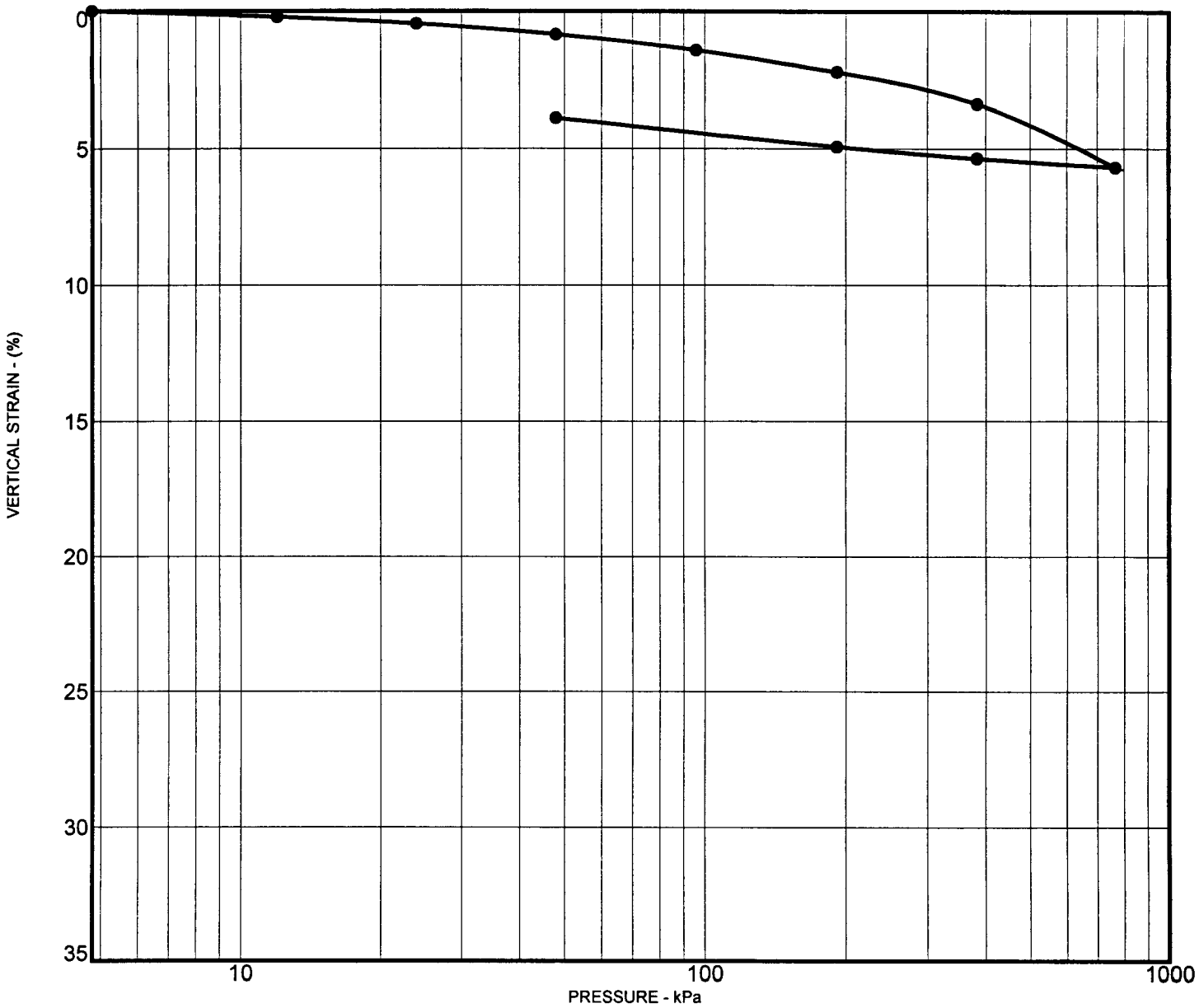
Boring Number:	SB-14-309
Sample Depth:	4.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	187.8	
Ring Weight	45.5	
Wet Wt.	142.3	
Wet + Tare		192.9
Dry + Tare		162.9
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/03/00	16:20:00			0202	
	19:00:00		8.6	0227	0.25
02/04/00	7:30:00		16.8	0245	0.43
	14:50:00		33.5	0300	0.98
02/05/00	8:30:00		67.0	0326	1.24
	17:50:00		134.5	0514	3.12
02/06/00	15:50:00		268.6	0675	4.73
02/07/00	11:50:00		537.7	0737	5.35
02/08/00	10:30:00		1075.4	1263	10.61
	16:35:00		537.7	1224	10.22
	19:00:00		268.6	1160	9.58
02/09/00	12:30:00		67.0	0985	7.83



Sample	SB-14-309
Depth	27.13 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	16.7	17.3
Water content, %	22.5	21.9
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

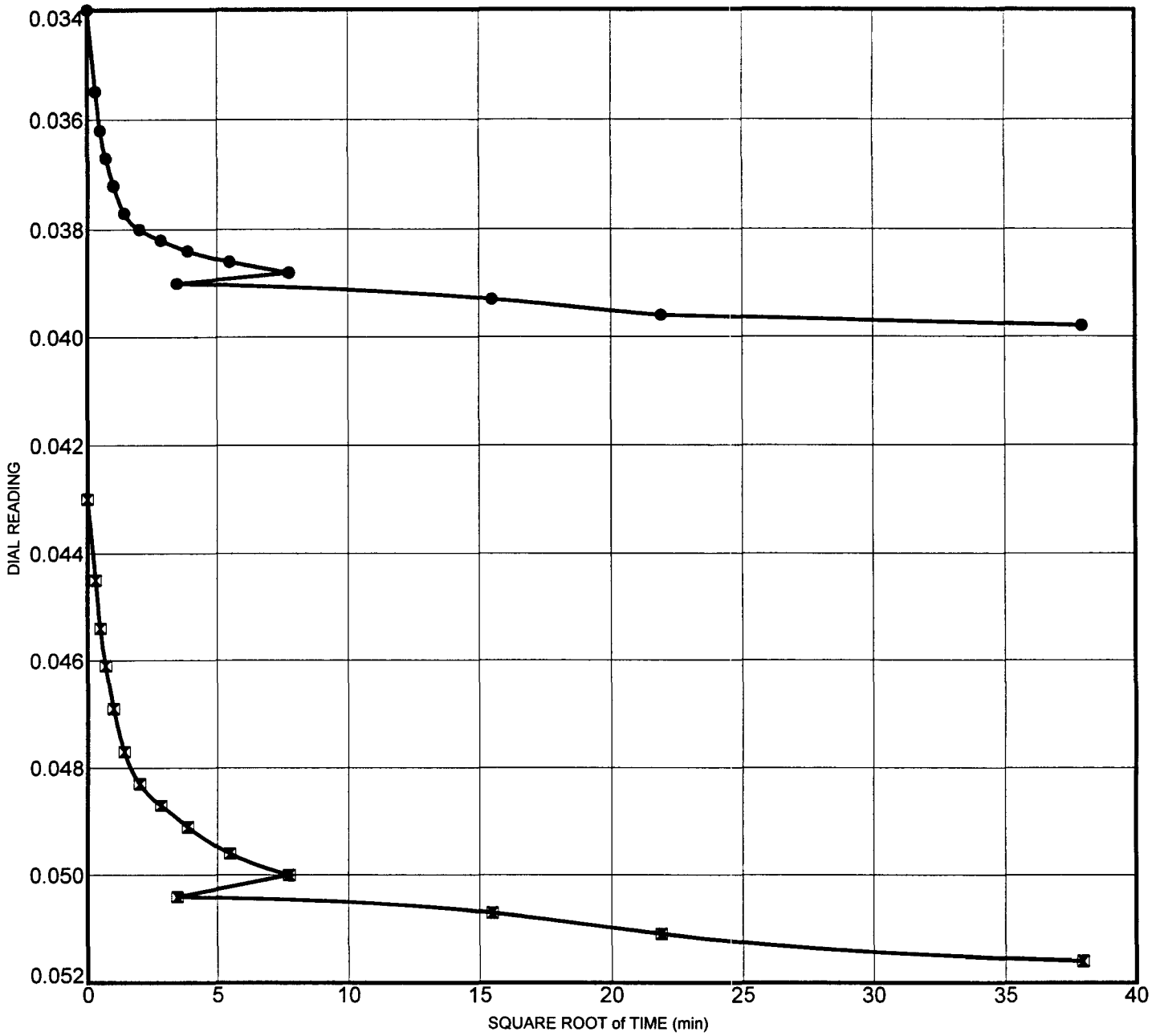
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-296



Sample	**SB-14-309**	
Depth	**27.1 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-297

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-14-309
Sample Depth:	27.1 m

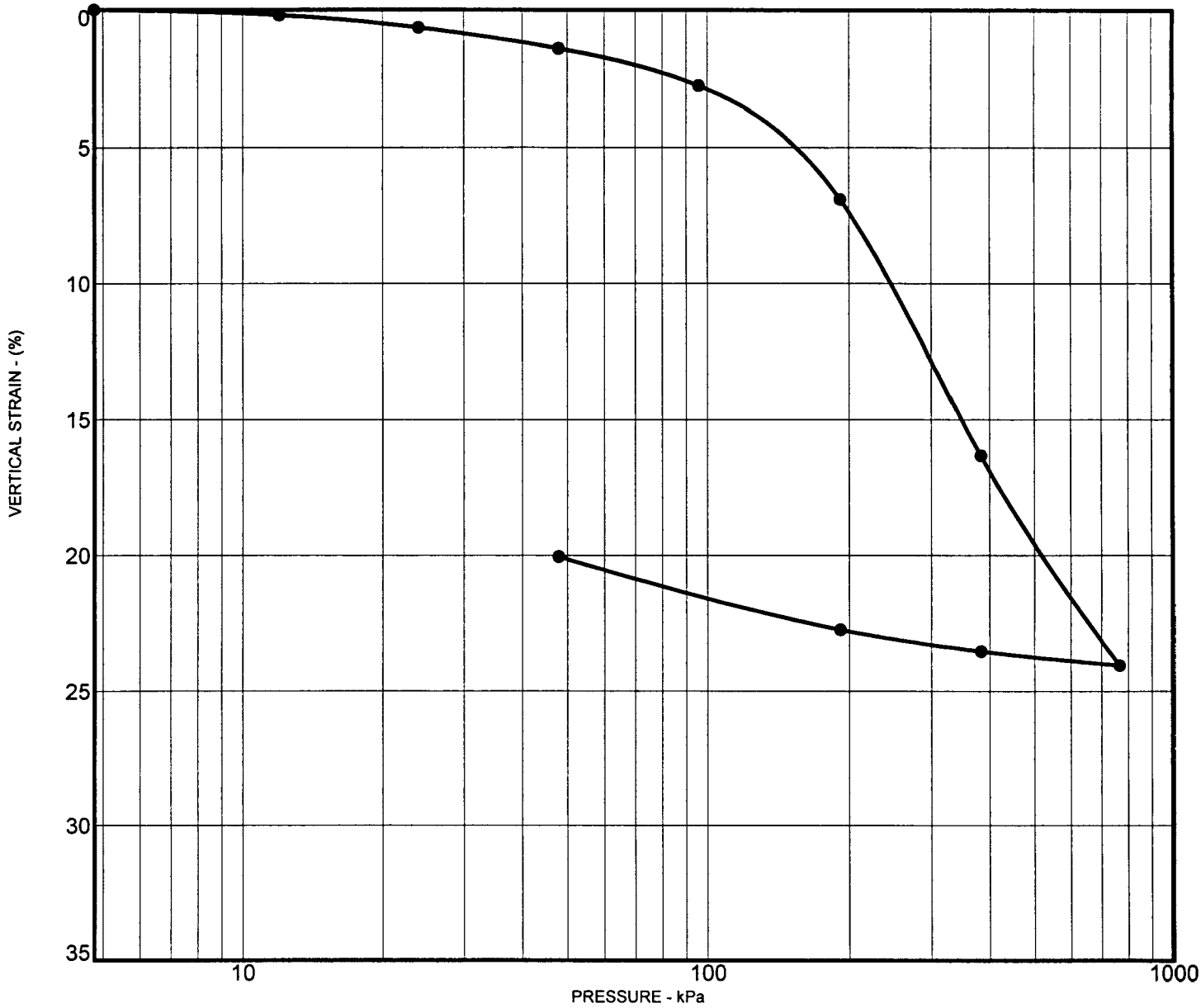
	Before Test (g)	After Test (g)
Wet Wt. + Ring	199.7	
Ring Weight	45.2	
Wet Wt.	154.5	
Wet + Tare		207.6
Dry + Tare		180
Tare Wt.		8.7

	Before Test (mm)	After Test (mm)
Sample Height	25.4	24.0
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/07/00	15:50:00			0200	
	16:55:00		4.8	0178	-0.22
	8:00:00		12.0	0200	0.00
	13:40:00		23.9	0225	0.25
	18:20:00		47.9	0264	0.64
02/09/00	8:20:00		95.8	0322	1.22
	8:20:00	0:00:00	191.5	0340	
	8:20:06	0:00:06		0355	
	8:20:15	0:00:15		0362	
	8:20:30	0:00:30		0367	
	8:21:00	0:01:00		0372	
	8:22:00	0:02:00		0377	
	8:24:00	0:04:00		0380	
	8:28:00	0:08:00		0382	
	8:35:00	0:15:00		0384	
	8:50:00	0:30:00		0386	
	9:20:00	1:00:00		0388	
	10:20:00	2:00:00		0390	
	12:20:00	4:00:00		0393	
	16:20:00	8:00:00		0396	
02/10/00	8:20:00	24:00:00	191.5	0398	1.98
02/11/00	7:50:00	47:30:00	191.5	0402	2.02
	7:55:00	0:00:00		0430	
	7:55:06	0:00:06		0445	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	7:55:15	0:00:15		0454	
	7:55:30	0:00:30		0461	
	7:56:00	0:01:00		0469	
	7:57:00	0:02:00		0477	
	7:59:00	0:04:00		0483	
	8:03:00	0:08:00		0487	
	8:10:00	0:15:00		0491	
	8:25:00	0:30:00		0496	
	8:55:00	1:00:00		0500	
	9:55:00	2:00:00		0504	
	11:55:00	4:00:00		0507	
	15:55:00	8:00:00		0511	
02/12/00	7:55:00	24:00:00	383.0	0516	3.16
02/13/00	8:10:00		766.1	0745	5.45
	17:30:00		383.0	0713	5.13
02/14/00	7:00:00		191.5	0671	4.71
	16:40:00		47.9	0567	3.67



Sample	**SB-14-313**
Depth	**13.72 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**9.4**	**11.7**
Water content, %	**67.3**	**49.4**
Sample height, mm	**25.4**	**20.3**

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-300

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

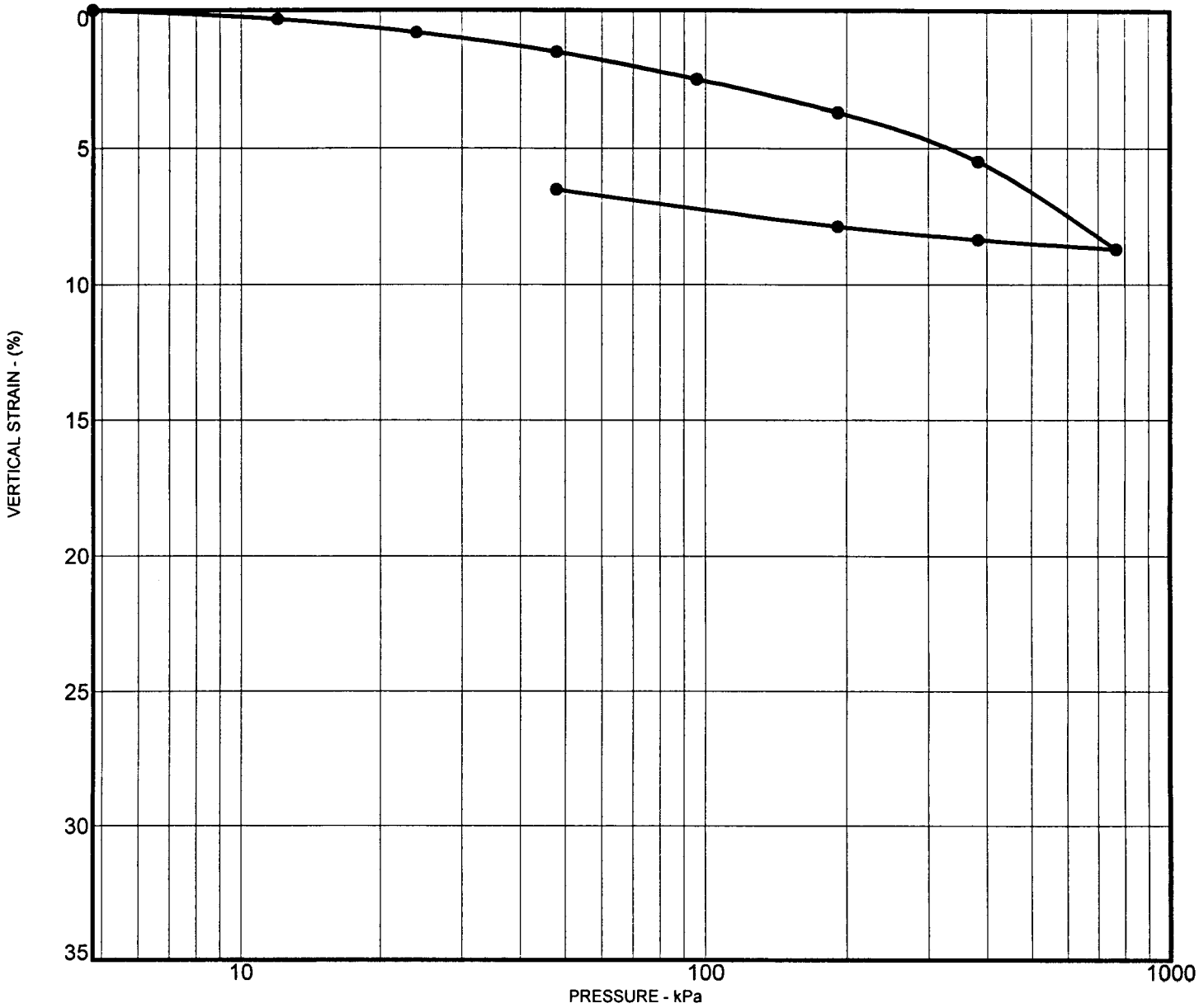
Boring Number:	SB-14-313
Sample Depth:	13.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	163.9	
Ring Weight	45.1	
Wet Wt.	118.8	
Wet + Tare		159.6
Dry + Tare		124.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.8
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/26/00	19:30:00			0165	
	21:00:00		4.8	0300	1.35
01/27/00	8:15:00		12.0	0320	1.55
	15:20:00		23.9	0366	2.01
	20:00:00		47.9	0443	2.78
01/28/00	6:00:00		95.8	0577	4.12
01/29/00	10:00:00		191.5	0990	8.25
01/30/00	9:40:00		383.0	1933	17.68
01/31/00	18:30:00		766.1	2705	25.40
02/01/00	10:20:00		383.0	2653	24.88
	19:20:00		191.5	2573	24.08
02/02/00	9:40:00		47.9	2304	21.39



Sample	SB-14-313
Depth	27.43 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.9	16.0
Water content, %	29.1	27.1
Sample height, mm	25.4	23.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-302

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

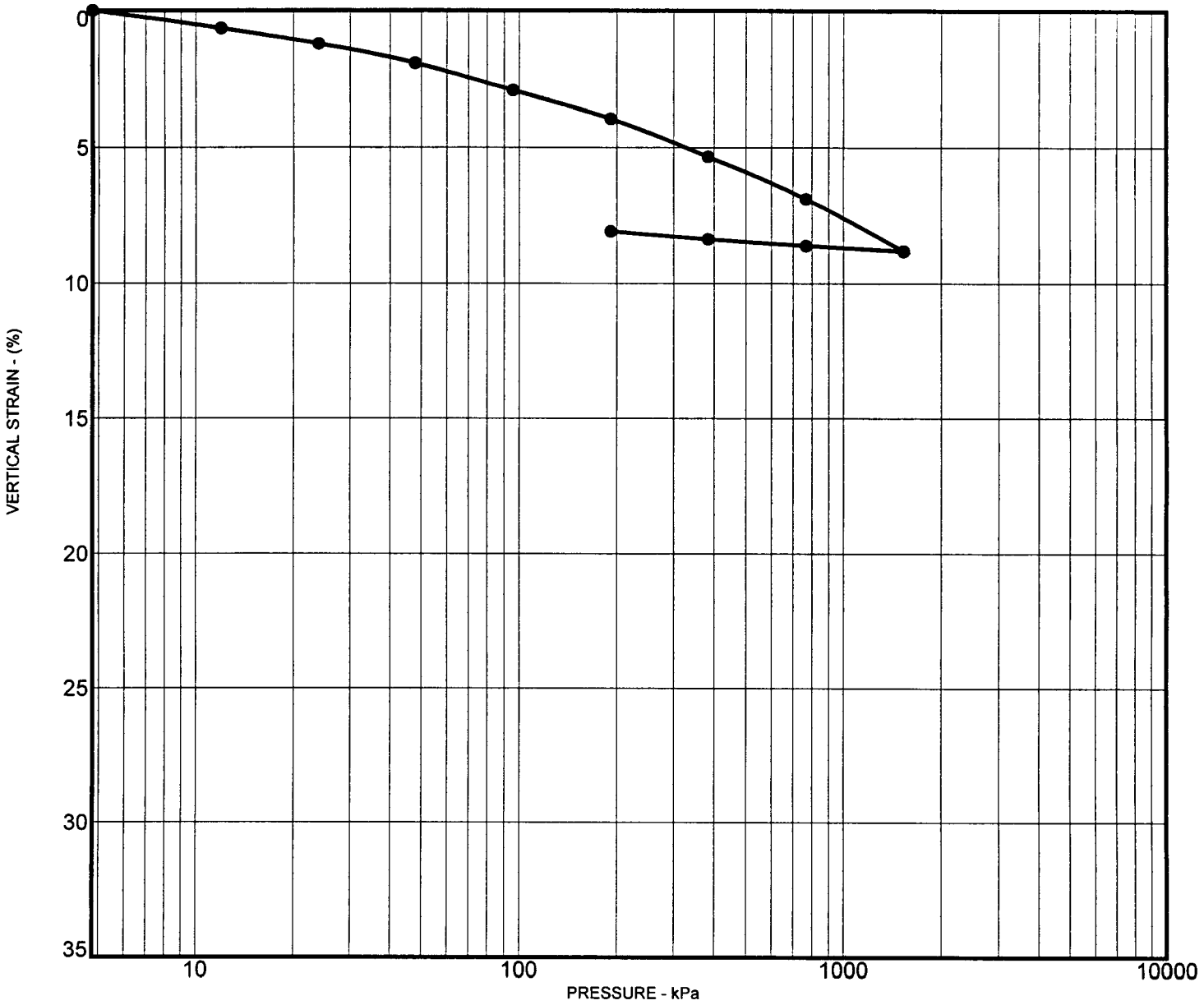
Boring Number:	SB-14-313
Sample Depth:	27.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	191.3	
Ring Weight	45.5	
Wet Wt.	145.8	
Wet + Tare		197.5
Dry + Tare		166.9
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/26/00	19:50:00			0194	
	21:00:00		4.8	0235	0.41
01/27/00	8:15:00		12.0	0268	0.74
	15:20:00		23.9	0318	1.24
	20:00:00		47.9	0389	1.95
01/28/00	7:50:00		95.8	0488	2.94
	16:00:00		191.5	0606	4.12
01/29/00	16:50:00		383.0	0784	5.90
01/30/00	20:30:00		766.1	1105	9.11
01/31/00	8:50:00		383.0	1070	8.76
	16:50:00		191.5	1020	8.26
02/01/00	9:15:00		47.9	0885	6.91



Sample	SB-14-313
Depth	53.34 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	16.3	17.8
Water content, %	24.3	19.8
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-304

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

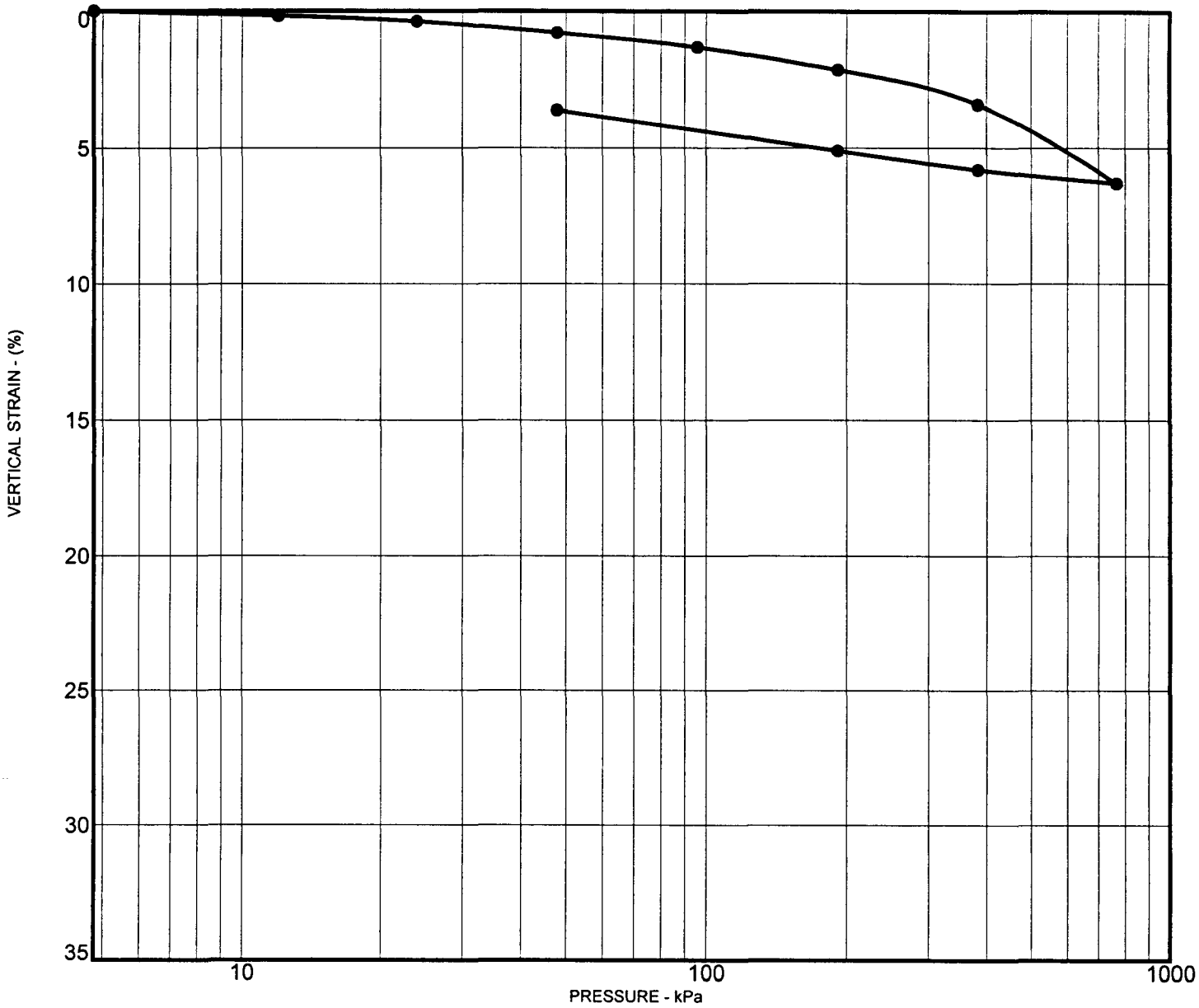
Boring Number:	SB-14-313
Sample Depth:	53.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	198.9	
Ring Weight	45.4	
Wet Wt.	153.5	
Wet + Tare		201.9
Dry + Tare		177.4
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/01/00	8:20:00			0198	
	17:30:00		4.8	0302	1.04
02/02/00	7:45:00		12.0	0367	1.69
	15:44:00		23.9	0424	2.26
	19:00:00		47.9	0495	2.97
02/03/00	11:15:00		95.8	0595	3.97
	19:00:00		191.5	0698	5.00
02/04/00	11:35:00		383.0	0835	6.37
02/05/00	8:30:00		766.1	0992	7.94
02/06/00	15:45:00		1532.2	1184	9.86
02/07/00	8:15:00		766.1	1164	9.66
	13:50:00		383.0	1140	9.42
02/08/00	8:05:00		191.5	1111	9.13
	13:40:00		47.9	1058	8.60



Sample	SB-15-266
Depth	6.10 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	14.3	14.8
Water content, %	32.7	31.6
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-306

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

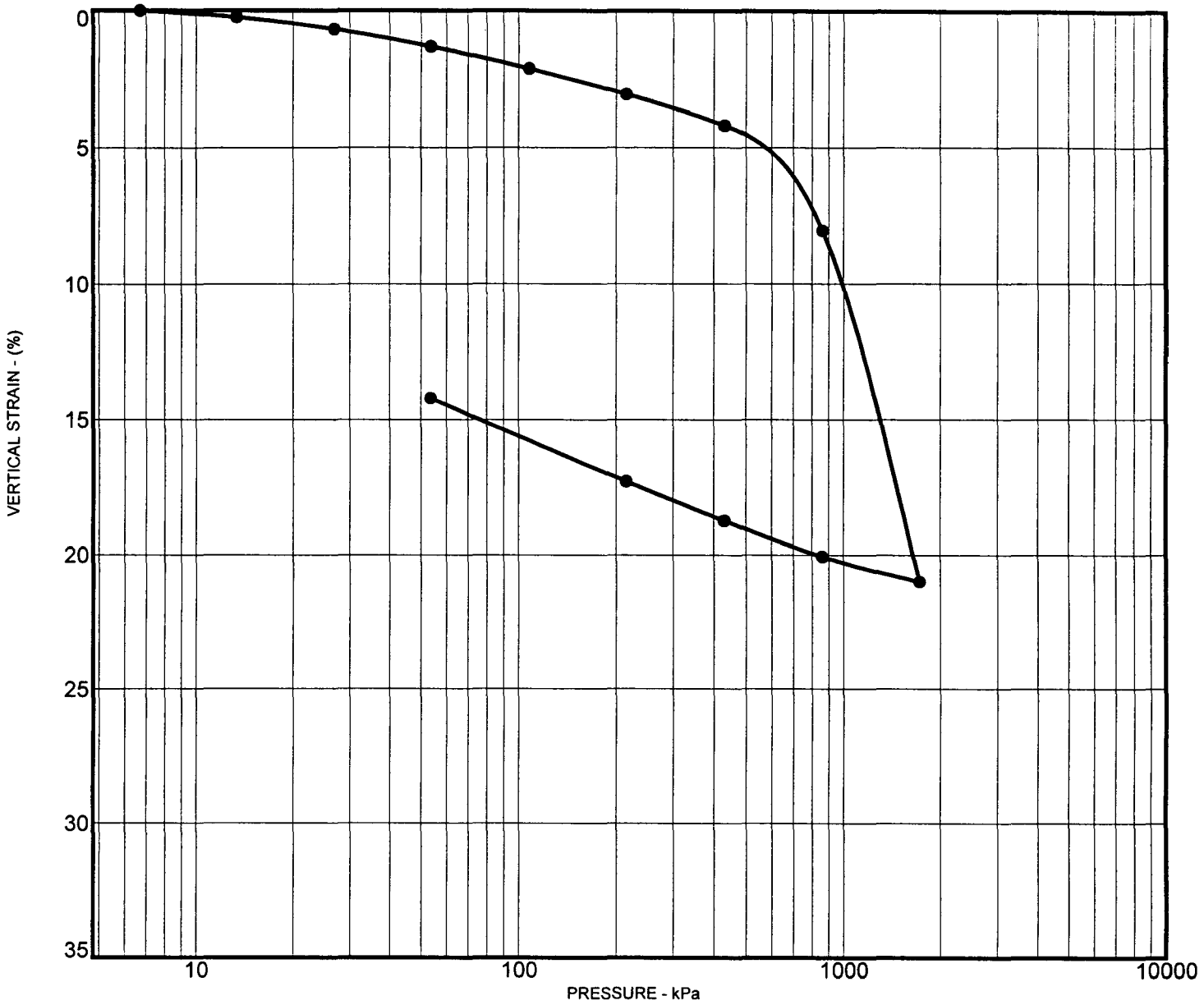
Boring Number:	SB-15-266
Sample Depth:	6.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	188.5	
Ring Weight	45	
Wet Wt.	143.5	
Wet + Tare		195.7
Dry + Tare		161.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/25/00	17:25:00			0199	
	18:30:00		4.8	0194	-0.05
01/26/00	8:00:00		12.0	0211	0.12
	15:30:00		23.9	0232	0.33
01/27/00	8:15:00		47.9	0273	0.74
	17:30:00		95.8	0326	1.27
01/28/00	6:00:00		191.5	0409	2.10
01/29/00	10:00:00		383.0	0535	3.36
01/30/00	9:35:00		766.1	0824	6.25
	20:40:00		383.0	0775	5.76
01/31/00	8:50:00		191.5	0705	5.06
	18:20:00		47.9	0556	3.57



Sample	SB-15-266
Depth	48.77 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	12.5	14.6
Water content, %	44.7	41.4
Sample height, mm	25.4	21.8

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-308

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

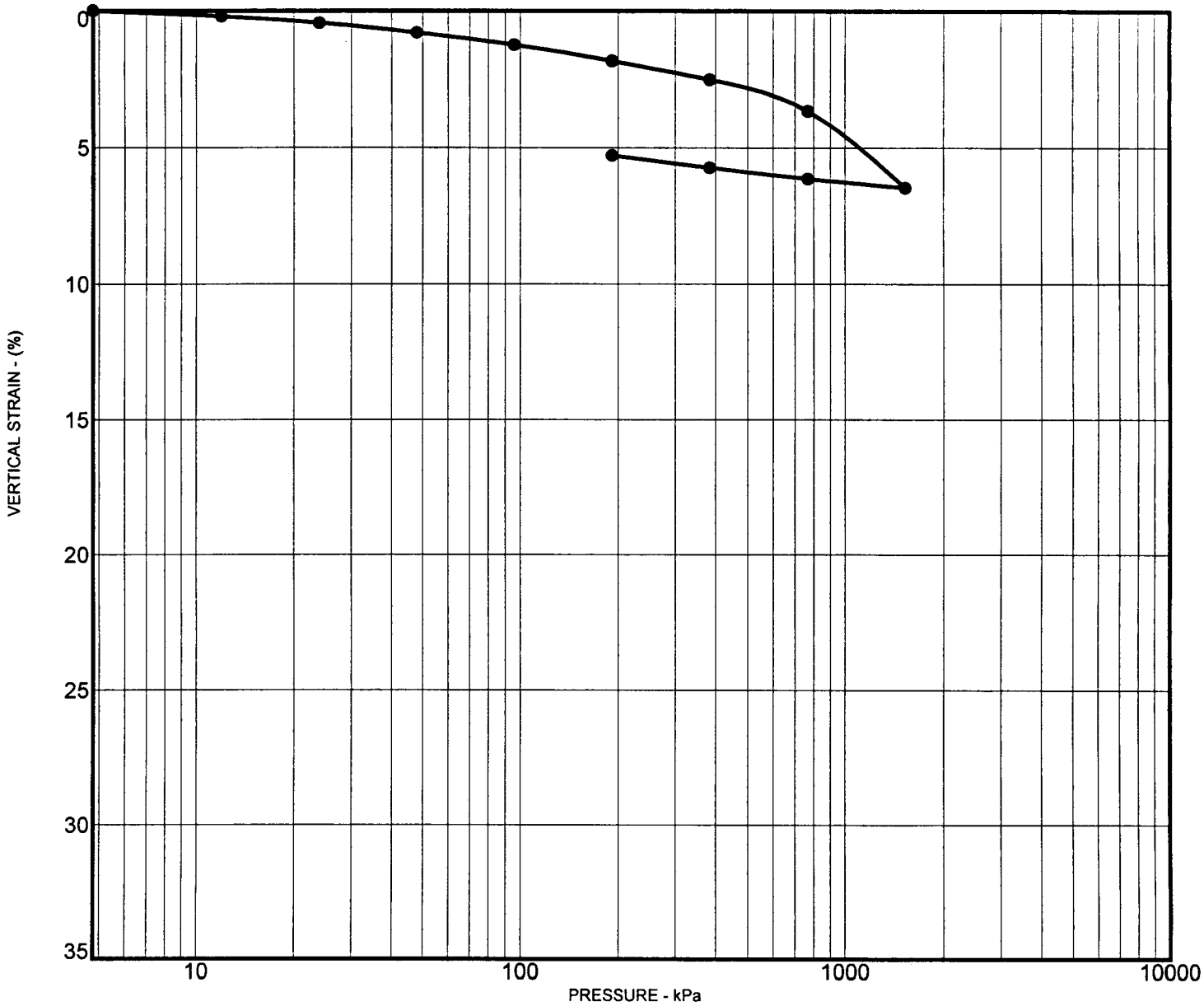
Boring Number:	SB-15-266
Sample Depth:	48.8 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.0	
Ring Weight	45.1	
Wet Wt.	136.9	
Wet + Tare		187.4
Dry + Tare		148.2
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	26.5
Sample Diameter	49.0	

Water added at 6.7 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/25/00	11:10:00			0415	
	17:30:00		6.7	0384	-0.31
01/26/00	8:00:00		13.4	0409	-0.06
	15:30:00		26.8	0453	0.38
	21:00:00		53.6	0516	1.01
01/27/00	8:15:00		107.7	0596	1.81
	18:55:00		215.0	0690	2.75
01/28/00	12:00:00		430.0	0805	3.90
01/29/00	10:00:00		859.9	1187	7.72
01/30/00	9:50:00		1720.3	2483	20.68
	20:40:00		859.9	2389	19.74
01/31/00	8:50:00		430.0	2257	18.42
02/01/00	11:40:00		215.0	2111	16.96
02/02/00	9:40:00		53.6	1805	13.90



Sample	SB-15-266
Depth	67.06 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.6	16.4
Water content, %	24.4	25.0
Sample height, mm	25.4	24.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-310

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

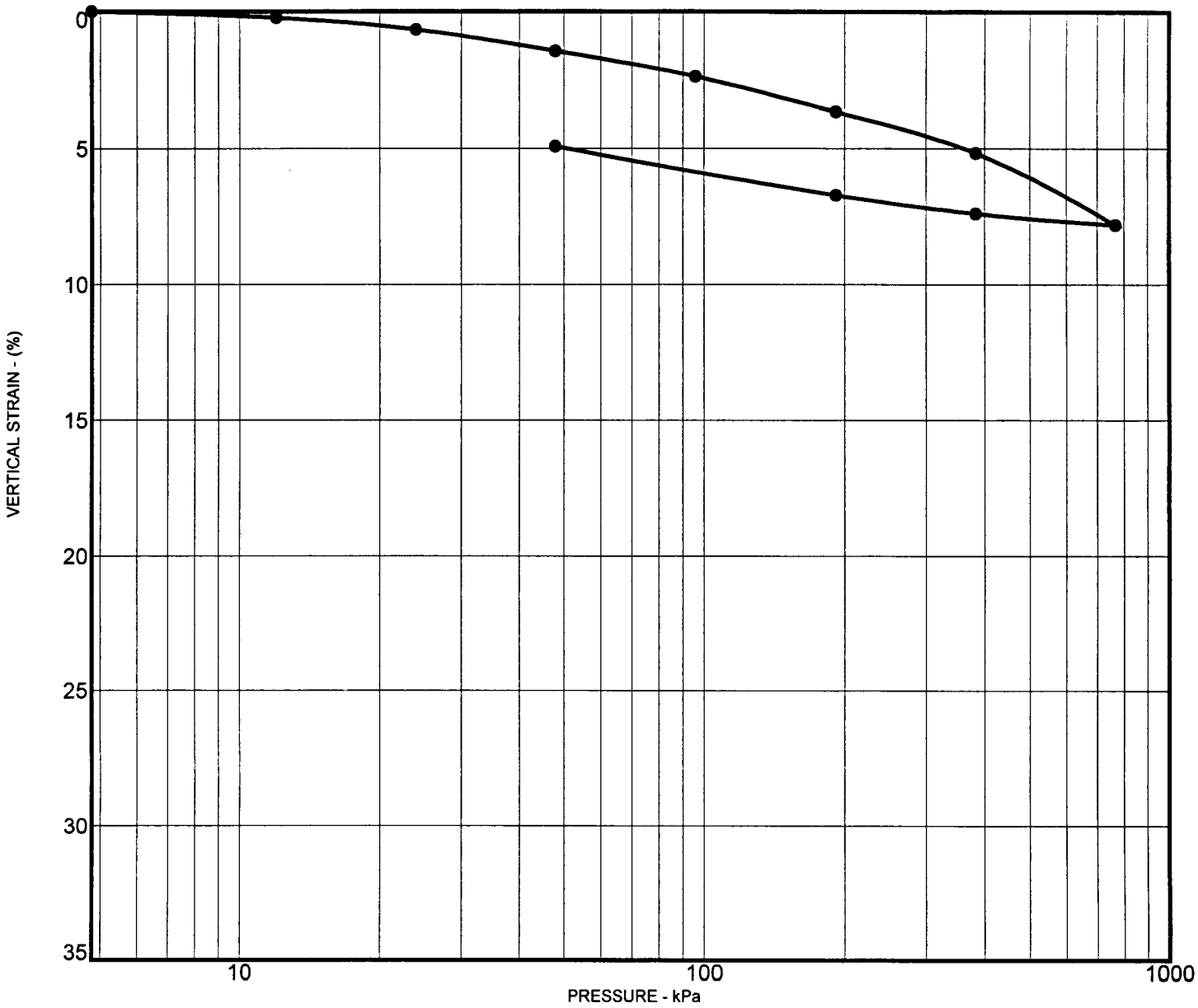
Boring Number:	SB-15-266
Sample Depth:	67.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	191.5	
Ring Weight	45	
Wet Wt.	146.5	
Wet + Tare		200.6
Dry + Tare		171.2
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/25/00	17:50:00			0186	
	18:30:00		4.8	0197	0.11
01/26/00	8:00:00		12.0	0218	0.32
	15:30:00		23.9	0242	0.56
	21:00:00		47.9	0278	0.92
01/27/00	8:15:00		95.8	0323	1.37
	18:55:00		191.5	0382	1.96
01/28/00	12:00:00		383.0	0450	2.64
01/29/00	10:00:00		766.1	0563	3.77
01/30/00	9:50:00		1532.2	0843	6.57
	20:40:00		766.1	0810	6.24
01/31/00	8:50:00		383.0	0770	5.84
	16:50:00		191.5	0725	5.39
02/01/00	9:20:00		47.9	0625	4.39



Sample	SB-15-267
Depth	5.49 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.9	15.7
Water content, %	29.4	27.6
Sample height, mm	25.4	24.1

KLEINFELDER

PROJECT NO. 35-8163-05

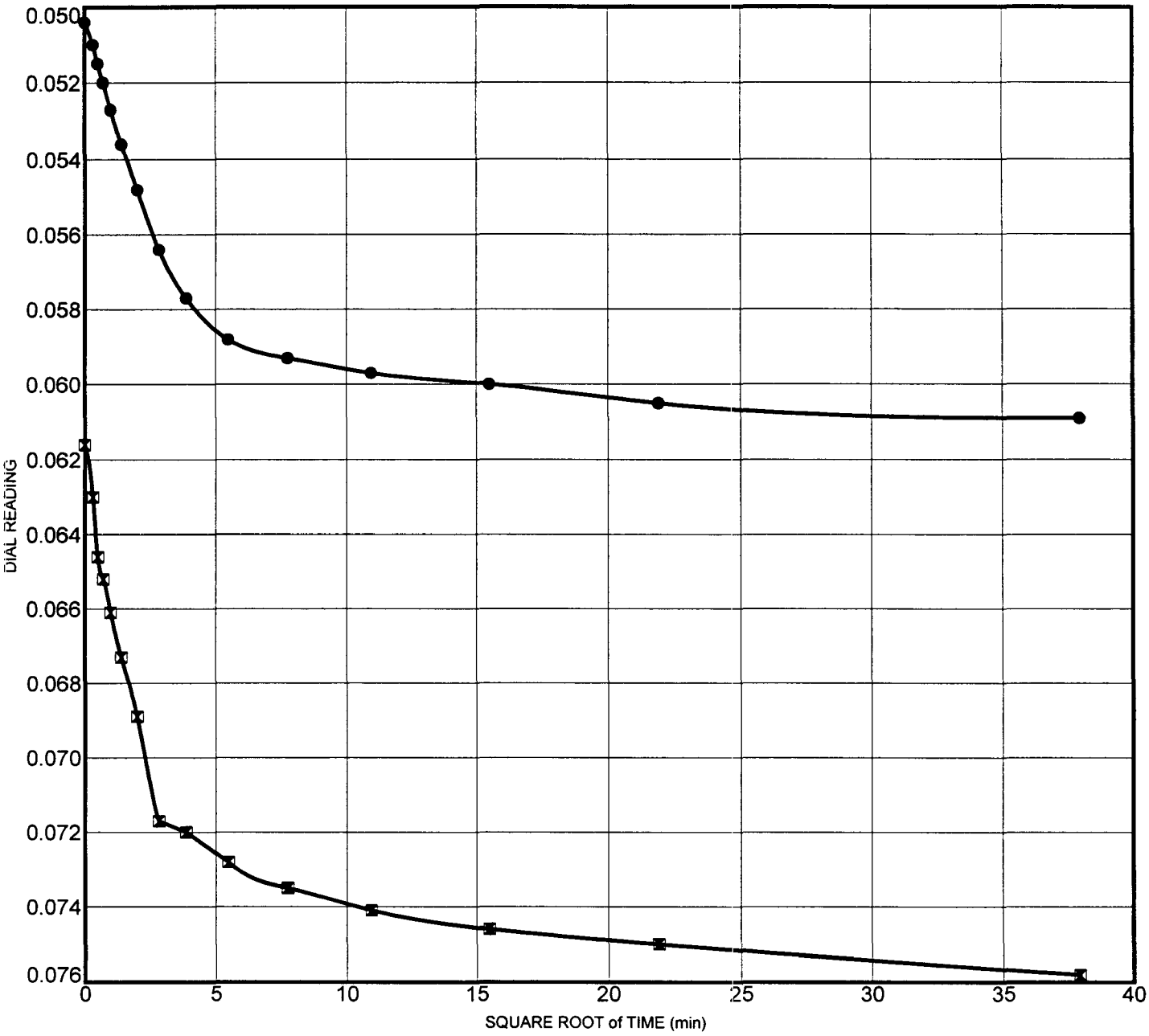
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-312



Sample	**SB-15-267**	
Depth	**5.5 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

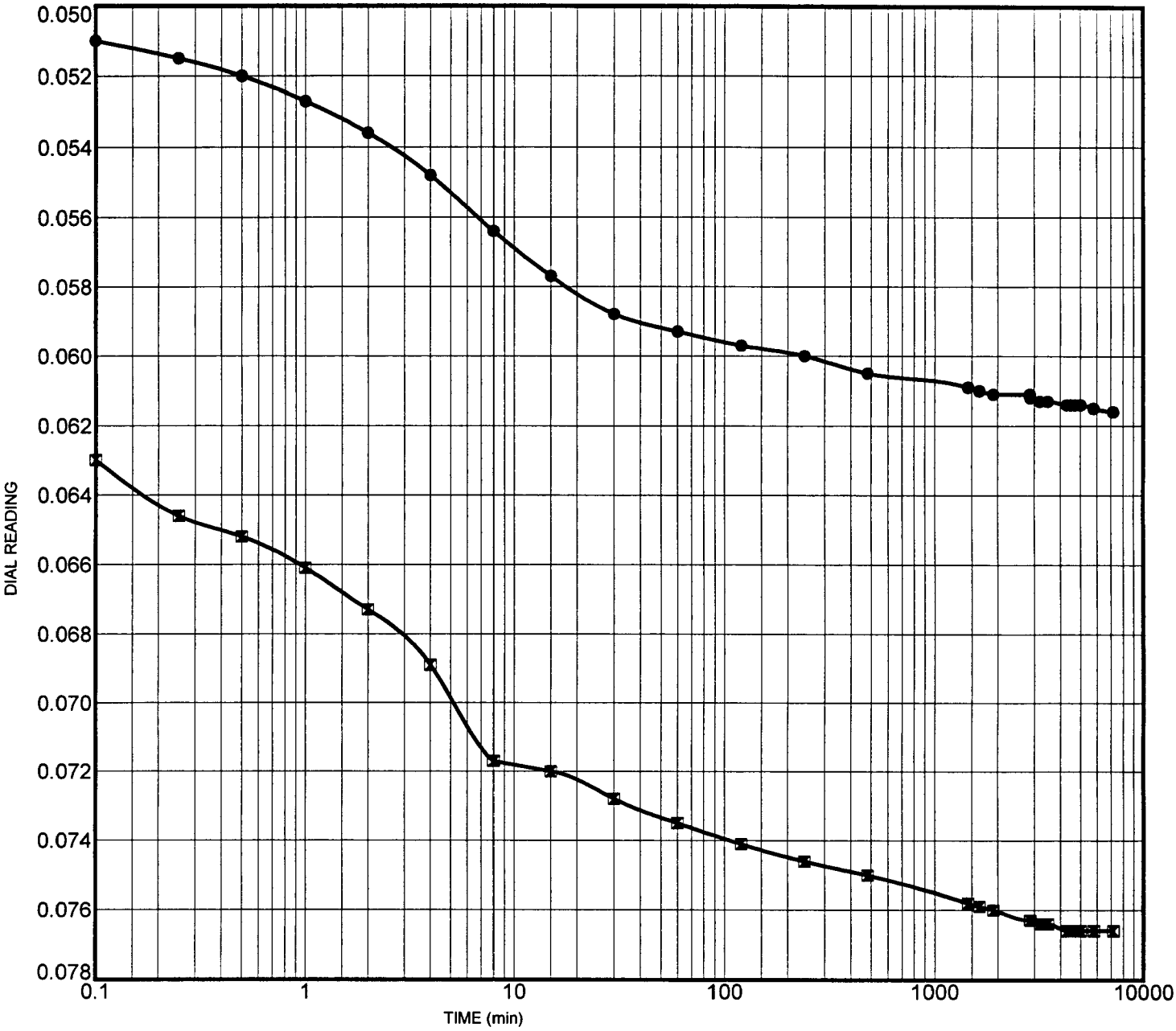
TIME RATE CONSOLIDATION

PLATE

K-313

PROJECT NO. **35-8163-05**

TIME RATE (RTC) 2-M-B Z003SB1.GPJ 6/1/00



Sample	**SB-15-267**	
Depth	**5.5 m**	
Pressure (kPa)	● **0.19**	⊠ **0.38**
Ca (m /day)		

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

SECONDARY CONSOLIDATION

PLATE

K-314

PROJECT NO. **35-8163-05**

(This page left blank intentionally.)

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number	SB-15-267
Sample Depth (m)	5.5 m

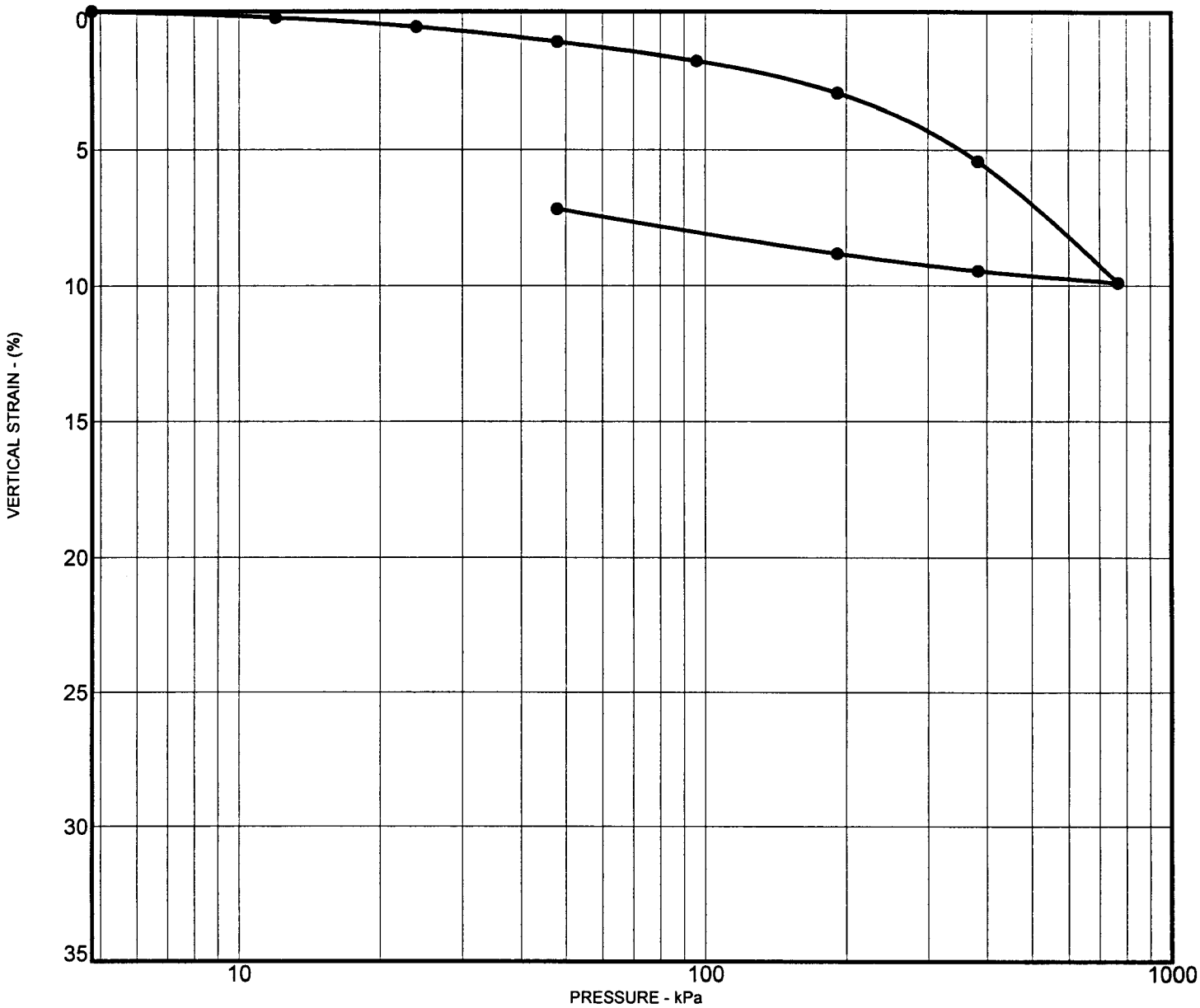
	Before Test (g)	After Test (g)
Wet Wt. + Ring	191.5	
Ring Weight	45.5	
Wet Wt.	146.0	
Wet + Tare		197.5
Dry + Tare		166.4
Tare Wt.		8.1

	Before Test (mm)	After Test (mm)
Sample Height	25.4	24.2
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/20/00	9:30:00			0246	
	17:15:00		4.8	0249	0.03
	8:20:00		12.0	0272	0.26
	14:45:00		23.9	0316	0.70
	10:25:00		47.9	0395	1.49
02/23/00	7:50:00		95.8	0488	2.42
	8:03:00	0:00:00	191.5	0504	2.58
	8:03:06	0:00:06		0510	
	8:03:15	0:00:15		0515	
	8:03:30	0:00:30		0520	
	8:04:00	0:01:00		0527	
	8:05:00	0:02:00		0536	
	8:07:00	0:04:00		0548	
	8:11:00	0:08:00		0564	
	8:18:00	0:15:00		0577	
	8:33:00	0:30:00		0588	
	9:03:00	1:00:00		0593	
	10:03:00	2:00:00		0597	
	12:03:00	4:00:00		0600	
	16:03:00	8:00:00		0605	
02/24/00	8:03:00	24:00:00		0609	
	11:15:00	27:12:00		0610	
02/25/00	8:00:00	47:57:00		0612	
	13:20:00	53:17:00		0613	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/26/00	11:00:00	74:57:00		0614	
	19:30:00	82:57:00		0614	
02/27/00	8:30:00	96:27:00		0615	
02/28/00	7:50:00	119:47:00	191.5	0616	3.70
	8:06:00	0:00:00	383.0	0630	3.84
	8:06:06	0:00:06		0639	
	8:06:15	0:00:15		0646	
	8:06:30	0:00:30		0652	
	8:07:00	0:01:00		0661	
	8:08:00	0:02:00		0673	
	8:10:00	0:04:00		0689	
	8:14:00	0:08:00		0717	
	8:21:00	0:15:00		0720	
	8:36:00	0:30:00		0728	
	9:06:00	1:00:00		0735	
	10:06:00	2:00:00		0741	
	12:06:00	4:00:00		0746	
	16:06:00	8:00:00		0750	
02/29/00	8:06:00	24:00:00		0758	
	15:50:00	31:44:00		0760	
03/01/00	7:50:00	47:44:00		0766	
	18:10:00	58:04:00		0764	
03/02/00	7:50:00	71:44:00		0766	
	14:30:00	84:24:00	383.0	0766	5.20
03/04/00	9:45:00		766.1	1029	7.83
	12:00:00		383.0	0988	7.42
	17:45:00		191.5	0921	6.75
03/05/00	17:45:00		47.9	0741	4.95



Sample	SB-15-267
Depth	27.43 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	14.3	15.4
Water content, %	30.5	28.2
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-317

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

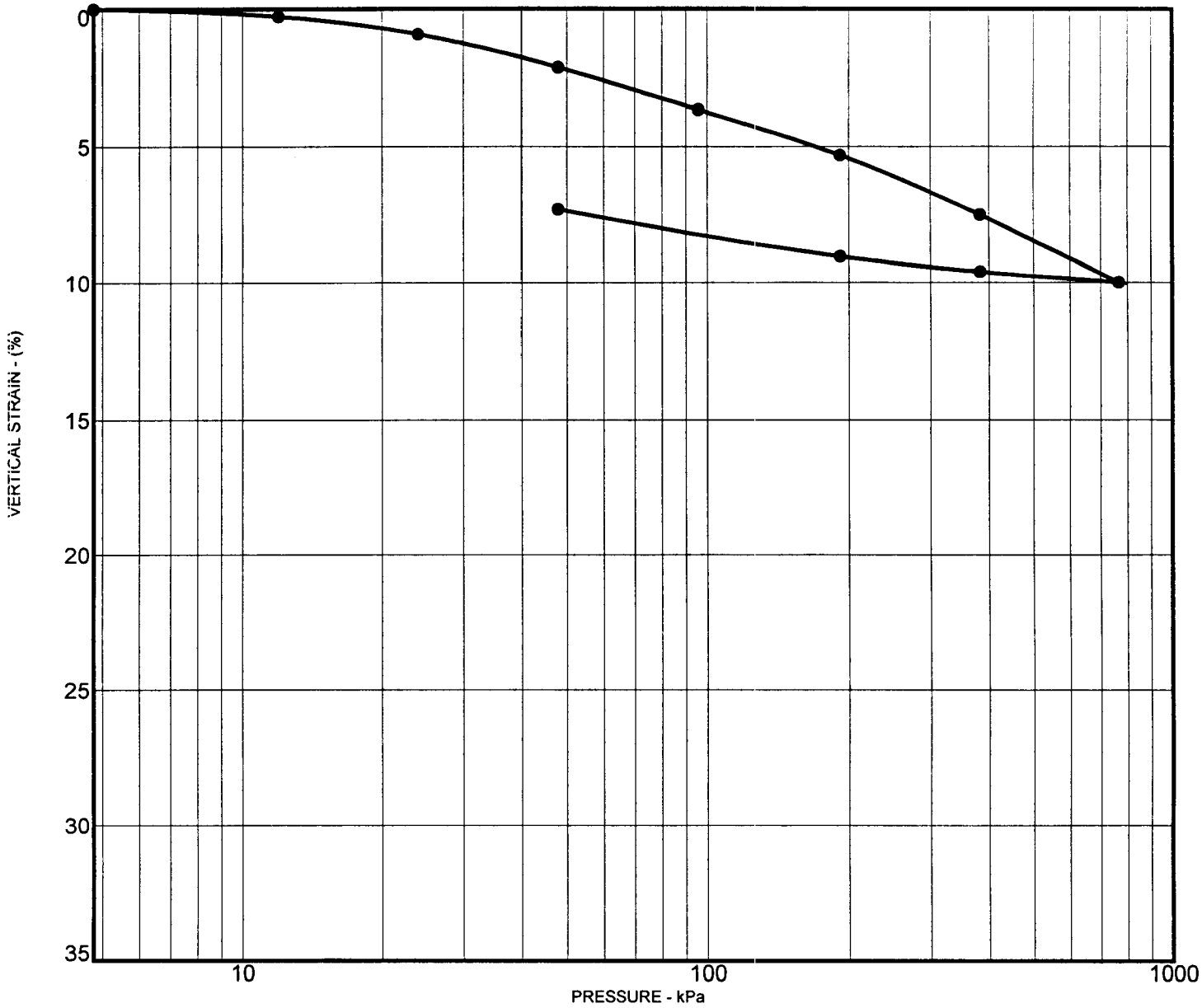
Boring Number:	SB-15-267
Sample Depth:	27.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	186.7	
Ring Weight	45.2	
Wet Wt.	141.5	
Wet + Tare		192.6
Dry + Tare		162
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/29/00	9:00:00			0197	
	14:30:00		4.8	0204	0.07
03/01/00	7:50:00		12.0	0227	0.30
	16:40:00		23.9	0260	0.63
03/02/00	7:50:00		47.9	0314	1.17
	11:25:00		95.8	0384	1.87
03/03/00	8:00:00		191.5	0501	3.04
03/04/00	9:50:00		383.0	0746	5.49
03/05/00	17:40:00		766.1	1194	9.97
03/06/00	8:15:00		383.0	1150	9.53
	19:30:00		191.5	1086	8.89
03/07/00	7:55:00		47.9	0920	7.23



Sample	SB-1504-359
Depth	1.52 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	16.0	17.2
Water content, %	24.7	22.4
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-319

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

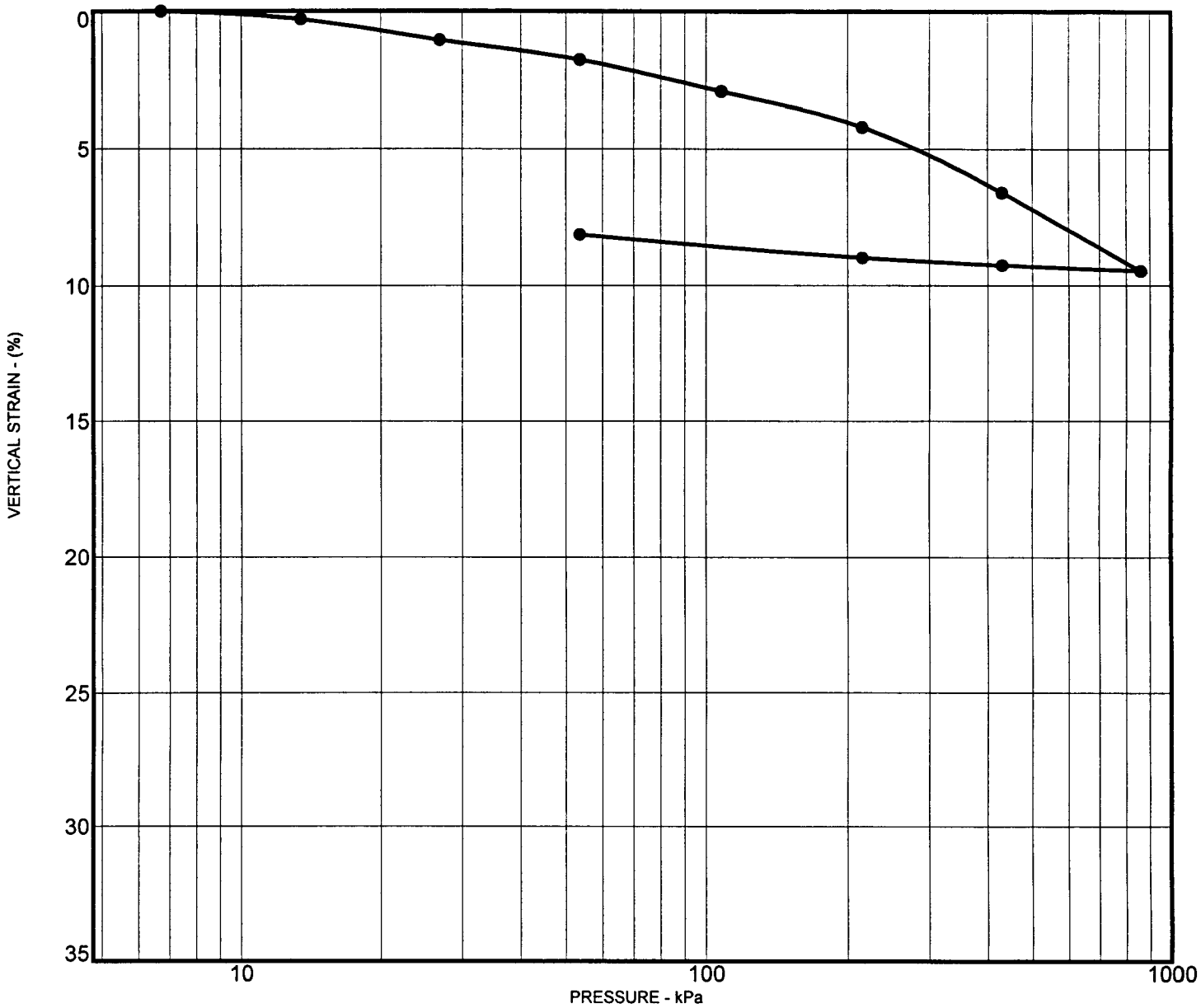
(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	SB-16-268
Depth	1.52 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.7	16.0
Water content, %	28.8	25.9
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

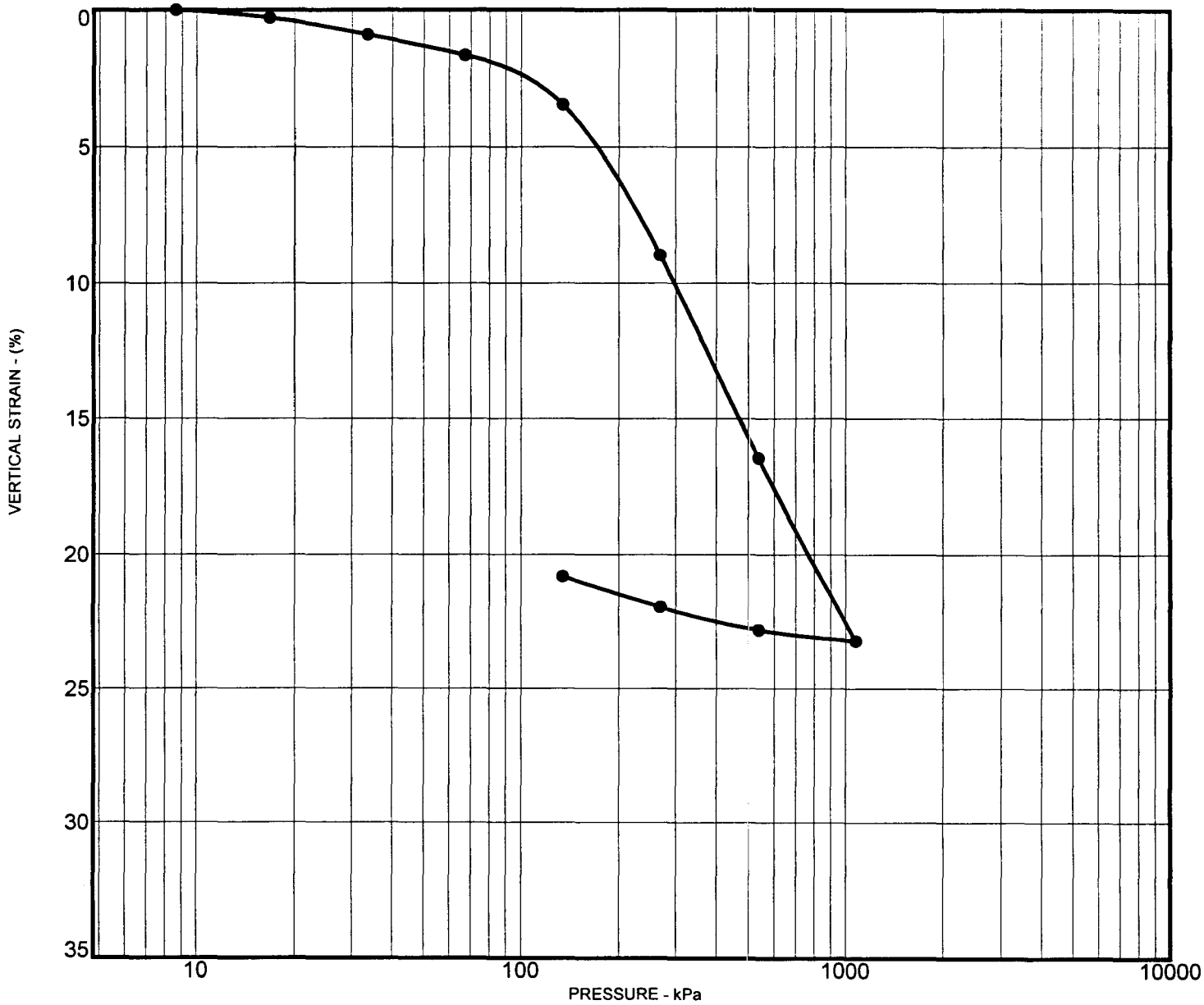
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-331

(This page left blank intentionally.)



Sample	SB-16-268
Depth	10.67 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	11.6	14.6
Water content, %	49.1	33.6
Sample height, mm	25.4	20.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-333

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

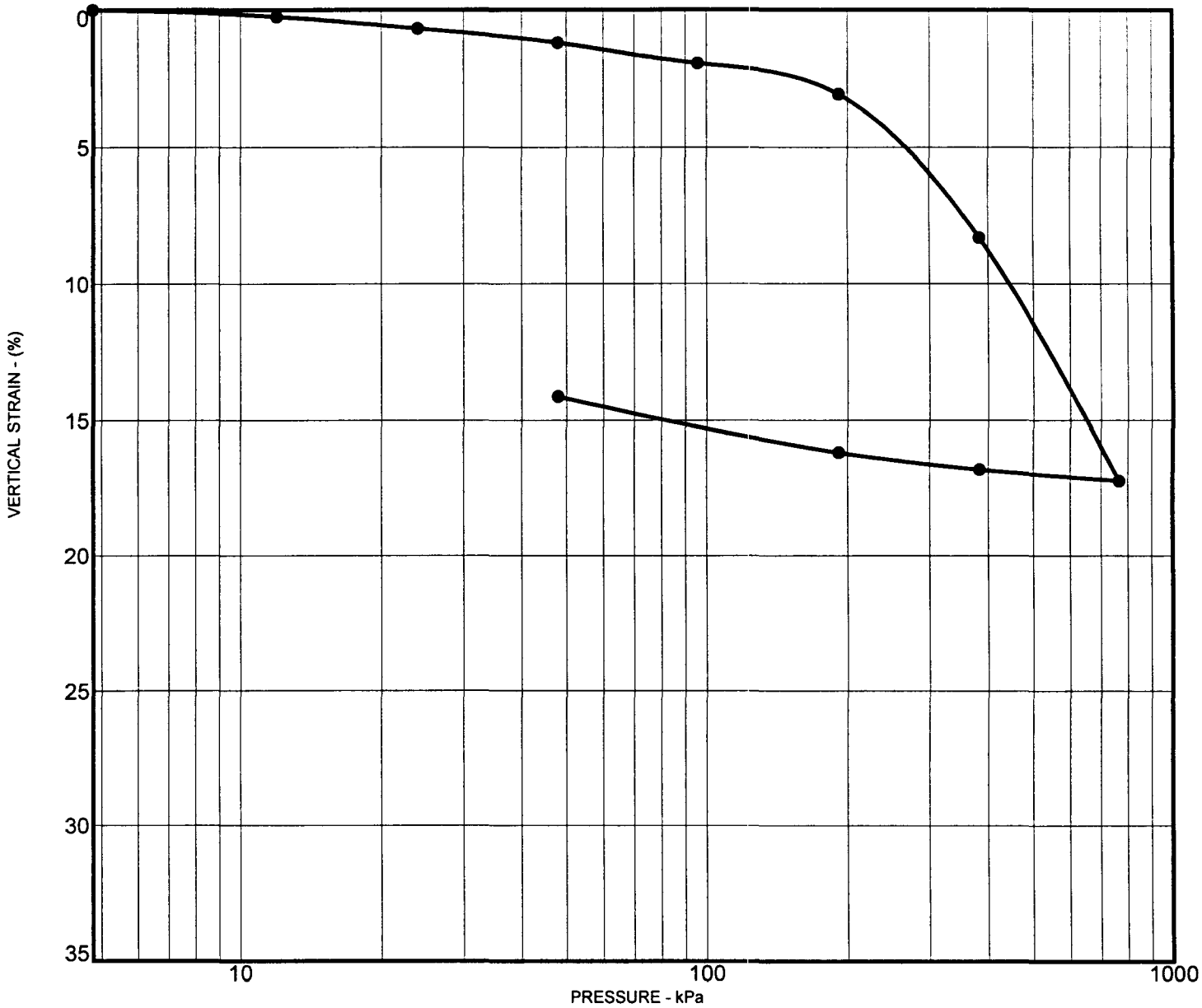
Boring Number:	SB-16-268
Sample Depth:	10.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	175.9	
Ring Weight	45.1	
Wet Wt.	130.8	
Wet + Tare		170.8
Dry + Tare		141.3
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/02/00	15:30:00			0205	
03/03/00	8:00:00		8.6	0229	0.24
	13:15:00		16.8	0258	0.53
03/04/00	9:40:00		33.5	0320	1.15
	18:45:00		67.0	0395	1.90
03/05/00	17:30:00		134.5	0576	3.71
03/06/00	19:30:00		268.6	1126	9.21
03/07/00	21:00:00		537.7	1875	16.70
03/08/00	19:20:00		1075.4	2551	23.46
03/09/00	17:50:00		537.7	2511	23.06
03/10/00	7:55:00		268.6	2425	22.20
	15:50:00		134.5	2310	21.05



Sample	SB-16-362
Depth	7.47 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	11.8	13.8
Water content, %	47.4	36.9
Sample height, mm	25.4	21.8

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

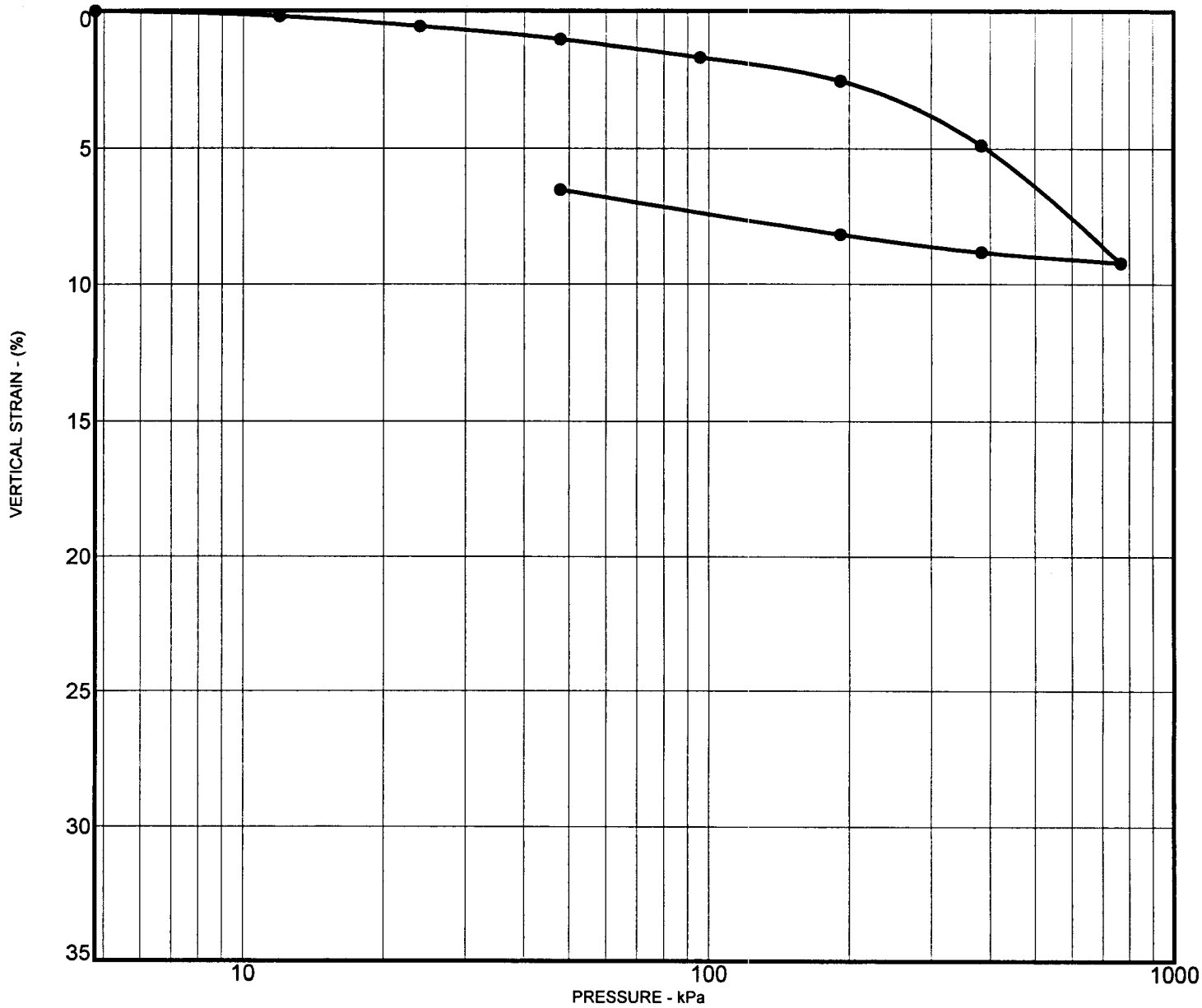
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-335

(This page left blank intentionally.)



Sample	SB-16-362
Depth	30.33 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.0	16.0
Water content, %	28.6	26.7
Sample height, mm	25.4	23.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-337

(This page left blank intentionally.)

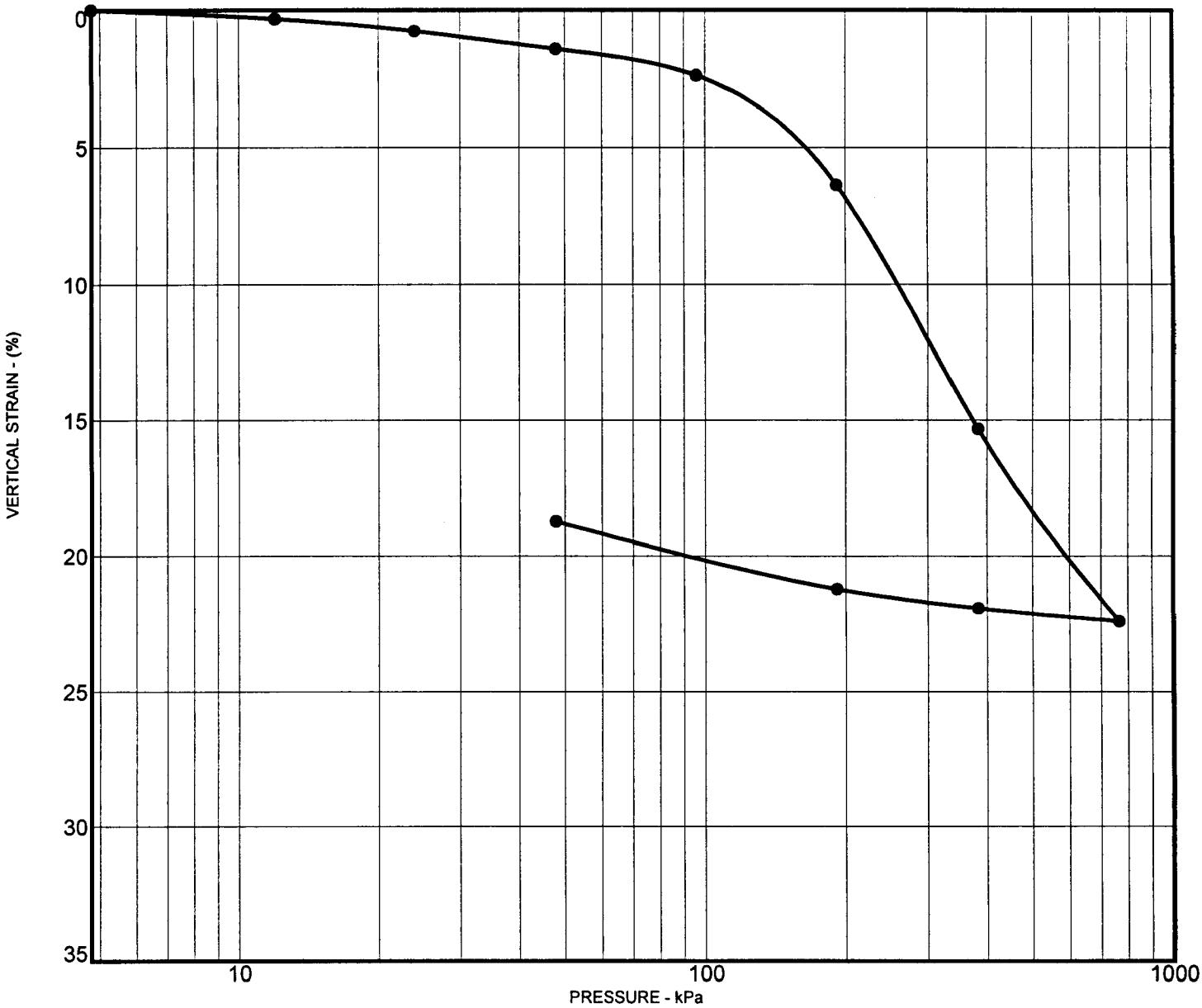
(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	SB-17-271
Depth	11.89 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	10.6	13.1
Water content, %	56.0	40.4
Sample height, mm	25.4	20.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-344

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

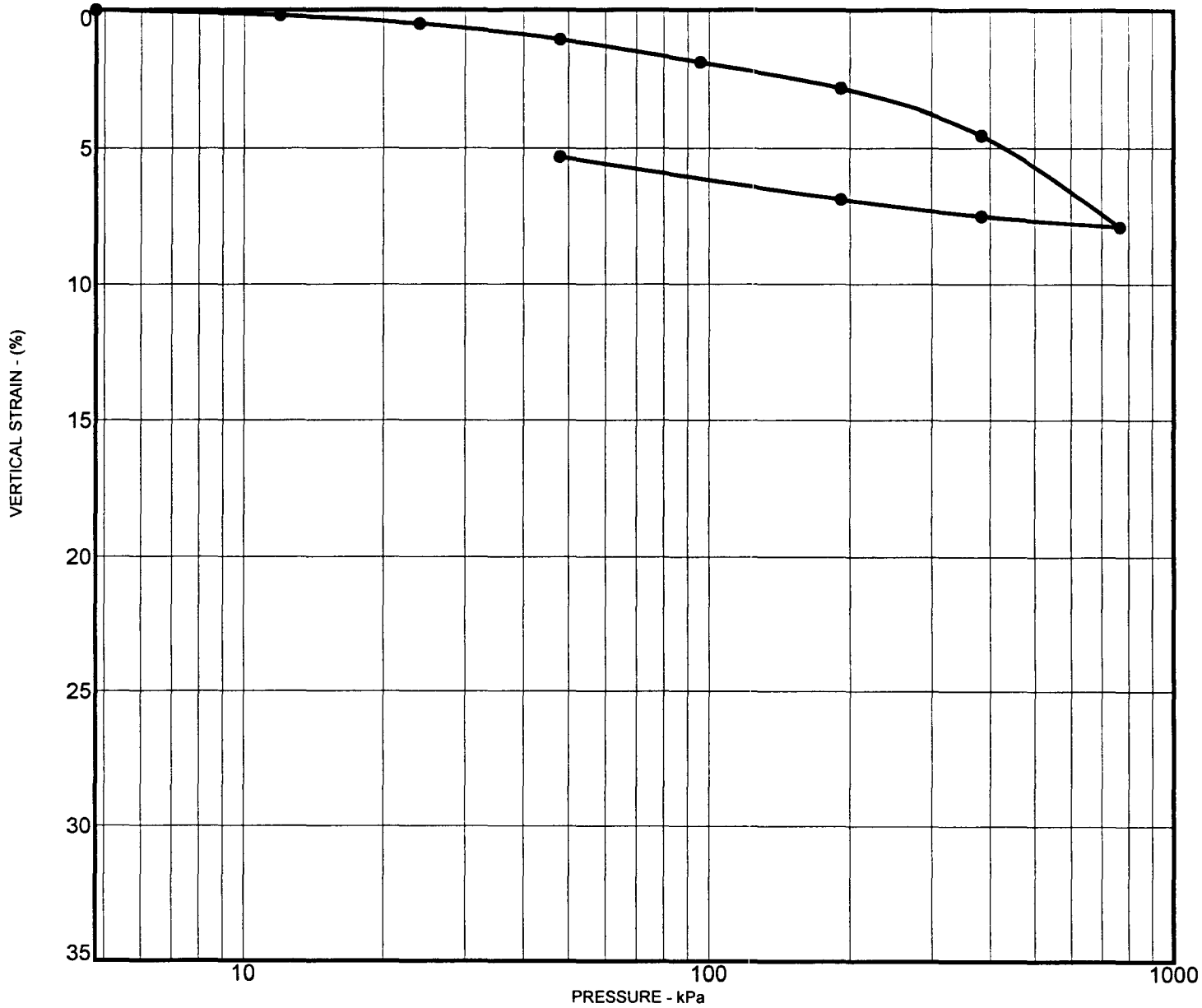
Boring Number:	SB-17-271
Sample Depth:	11.9 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	171.2	
Ring Weight	45.6	
Wet Wt.	125.6	
Wet + Tare		166.9
Dry + Tare		134.4
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/01/00	15:25:00			0202	
	19:20:00		4.8	0213	0.11
02/02/00	9:40:00		12.0	0245	0.43
	15:40:00		23.9	0290	0.88
	19:00:00		47.9	0355	1.53
02/03/00	11:15:00		95.8	0452	2.50
02/04/00	16:20:00		191.5	0849	6.47
02/05/00	17:50:00		383.0	1745	15.43
02/06/00	15:45:00		766.1	2453	22.51
02/07/00	8:15:00		383.0	2405	22.03
	14:00:00		191.5	2334	21.32
02/08/00	8:00:00		47.9	2085	18.83



Sample	SB-17-271
Depth	27.13 m
Classification	CL-ML

	Initial	Final
Dry density, kN/m^3	14.1	14.9
Water content, %	33.1	31.5
Sample height, mm	25.4	24.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-346

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

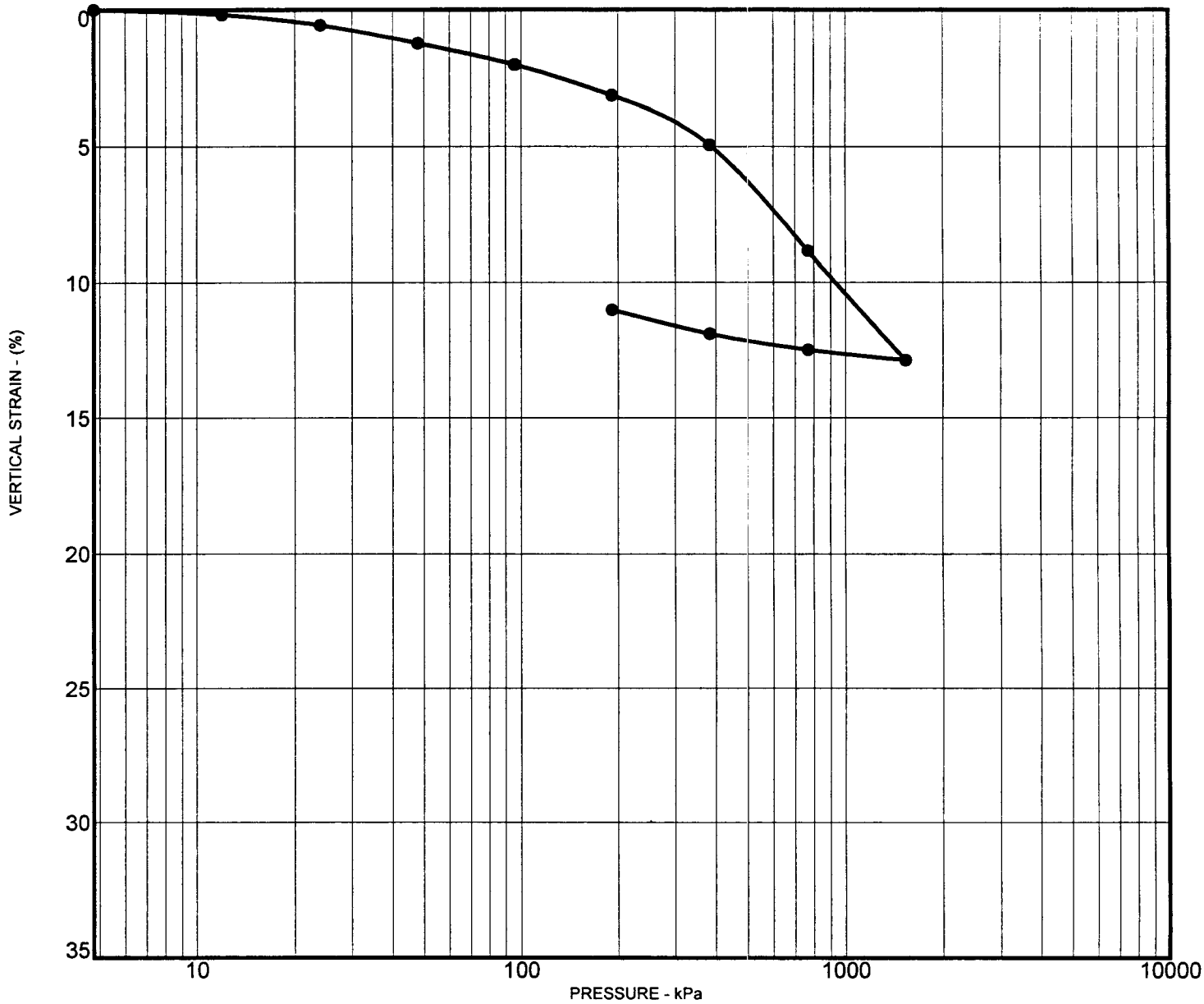
Boring Number:	SB-17-271
Sample Depth:	27.1 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	186.9	
Ring Weight	45.1	
Wet Wt.	141.8	
Wet + Tare		193.5
Dry + Tare		160
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/01/00	15:50:00			0210	
	19:20:00		4.8	0207	-0.03
02/02/00	9:40:00		12.0	0227	0.17
	15:40:00		23.9	0258	0.48
	19:00:00		47.9	0314	1.04
02/03/00	15:00:00		95.8	0398	1.88
	19:00:00		191.5	0492	2.82
02/04/00	11:45:00		383.0	0662	4.52
02/05/00	8:30:00		766.1	0995	7.85
	17:50:00		383.0	0955	7.45
02/06/00	15:45:00		191.5	0893	6.83
02/07/00	2:00:00		47.9	0739	5.29



Sample	SB-17-271
Depth	43.89 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.2	16.0
Water content, %	31.9	26.3
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-348

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

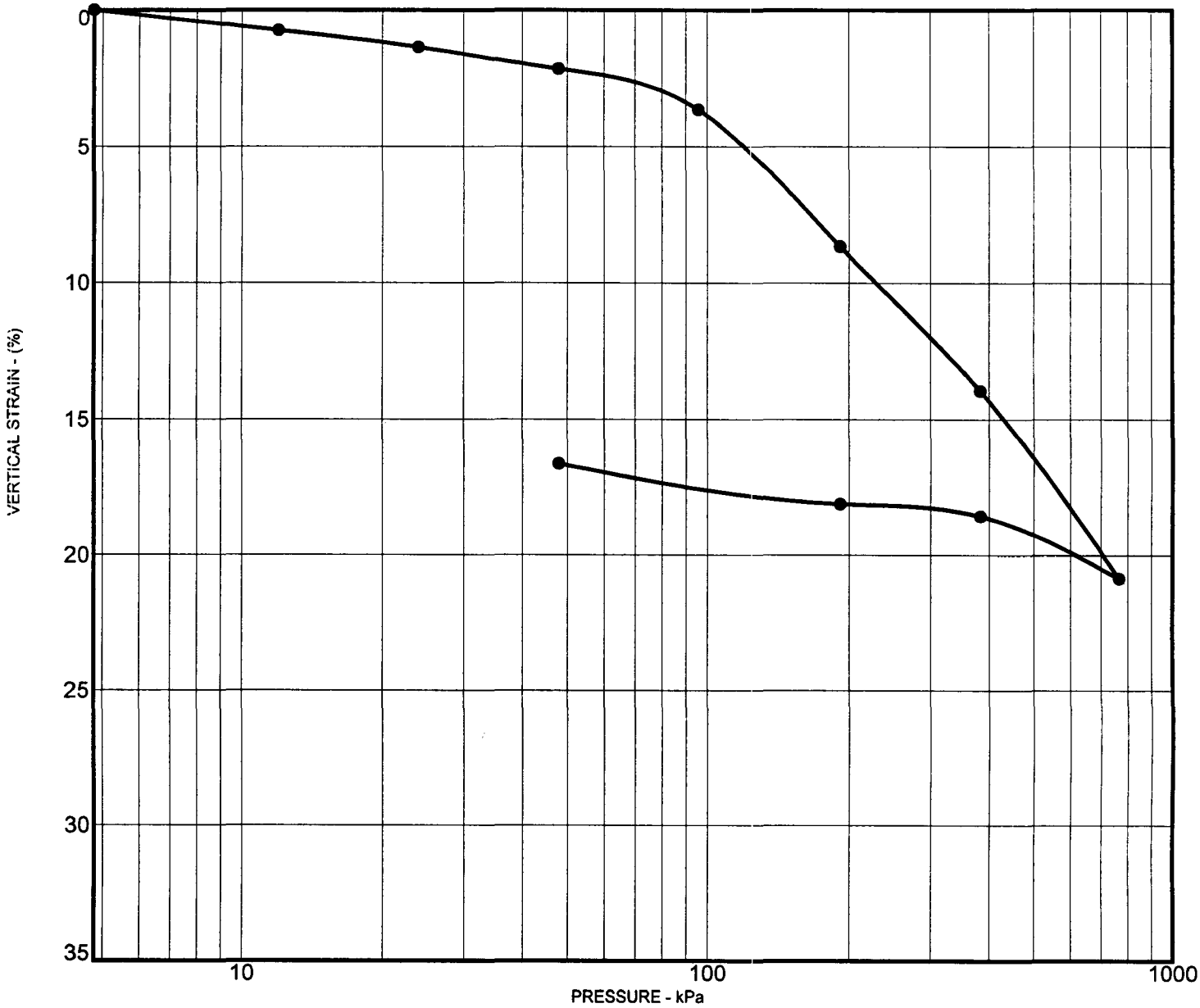
Boring Number:	SB-17-271
Sample Depth:	43.9 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	187.3	
Ring Weight	45.2	
Wet Wt.	142.1	
Wet + Tare		189.7
Dry + Tare		161.4
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
02/01/00	18:10:00			0210	
	19:20:00		4.8	0204	-0.06
02/02/00	9:40:00		12.0	0223	0.13
	19:00:00		23.9	0261	0.51
02/03/00	11:15:00		47.9	0328	1.18
	19:00:00		95.8	0407	1.97
02/04/00	11:45:00		191.5	0518	3.08
02/05/00	8:30:00		383.0	0698	4.88
02/08/00	10:30:00		766.1	1088	8.78
02/09/00	12:35:00		1532.2	1491	12.81
	17:10:00		766.1	1453	12.43
	19:00:00		383.0	1393	11.83
02/10/00	11:25:00		191.5	1305	10.95



Sample	SB-18-272
Depth	4.57 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.3	14.7
Water content, %	44.1	30.8
Sample height, mm	25.4	21.1

KLEINFELDER

PROJECT NO. 35-8163-05

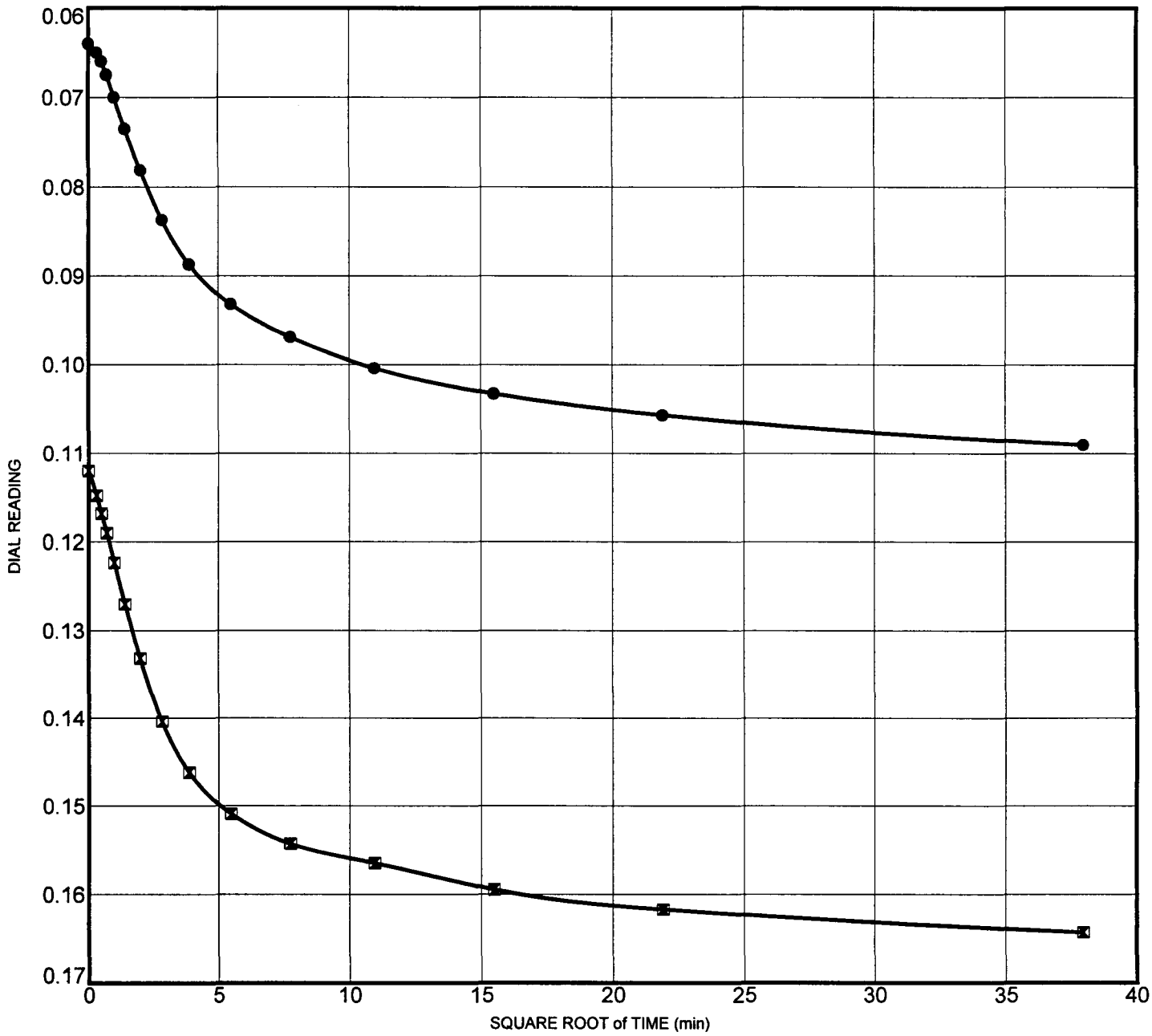
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-350



Sample	**SB-18-272**	
Depth	**4.6 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

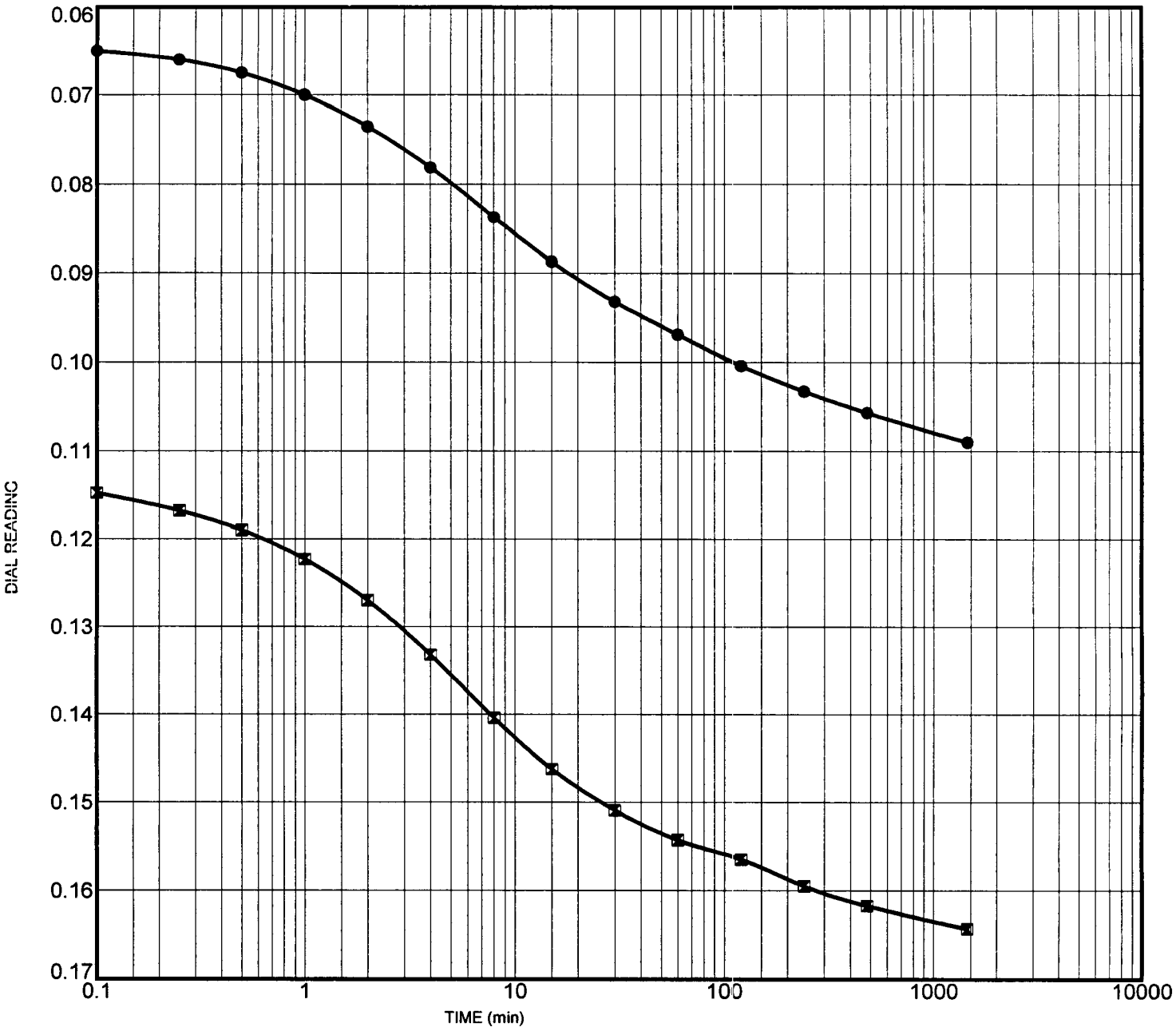
I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-351

TIME RATE (RTC) 2-M-B Z003SB2B.GPJ 6/1/00



Sample	**SB-18-272**	
Depth	**4.6 m**	
Pressure (kPa)	● **0.19**	⧗ **0.38**
Ca (m /day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

SECONDARY CONSOLIDATION

PLATE

K-352

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-18-272
Sample Depth:	4.6 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	179.5	
Ring Weight	45.7	
Wet Wt.	133.8	
Wet + Tare		175.5
Dry + Tare		146.9
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	20.0
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/24/00	14:40:00			0204	
	8:15:00		4.8	0248	0.44
	0:00:00		12.0	0324	1.20
	11:48:00		23.9	0386	1.82
	9:00:00		47.9	0466	2.62
	16:12:00		95.8	0615	4.11
	16:15:00	0:00:00	191.5	0640	
	16:15:06	0:00:06		0650	
	16:15:15	0:00:15		0660	
	16:15:30	0:00:30		0675	
	16:16:00	0:01:00		0700	
	16:17:00	0:02:00		0735	
	16:19:00	0:04:00		0781	
	16:23:00	0:08:00		0837	
	16:30:00	0:15:00		0887	
	16:45:00	0:30:00		0932	
	17:15:00	1:00:00		0969	
	18:15:00	2:00:00		1004	
	20:15:00	4:00:00		1033	
01/27/00	0:15:00	8:00:00		1057	
	16:15:00	24:00:00		1090	
01/28/00	8:00:00	39:45:00	191.5	1114	9.10
	8:00:00	0:00:00	383.0	1120	9.16
	8:00:06	0:00:06		1148	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	8:00:15	0:00:15		1168	
	8:00:30	0:00:30		1190	
	8:01:00	0:01:00		1223	
	8:02:00	0:02:00		1270	
	8:04:00	0:04:00		1332	
	8:08:00	0:08:00		1404	
	8:15:00	0:15:00		1462	
	8:30:00	0:30:00		1509	
	9:00:00	1:00:00		1543	
	10:00:00	2:00:00		1565	
	12:00:00	4:00:00		1595	
	16:00:00	8:00:00		1617	
01/29/00	8:00:00	24:00:00	383.0	1643	14.39
01/30/00	9:35:00		766.1	2332	21.28
	20:00:00		383.0	2104	19.00
01/31/00	12:15:00		191.5	2059	18.55
	18:45:00		47.9	1911	17.07

(This page left blank intentionally.)

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

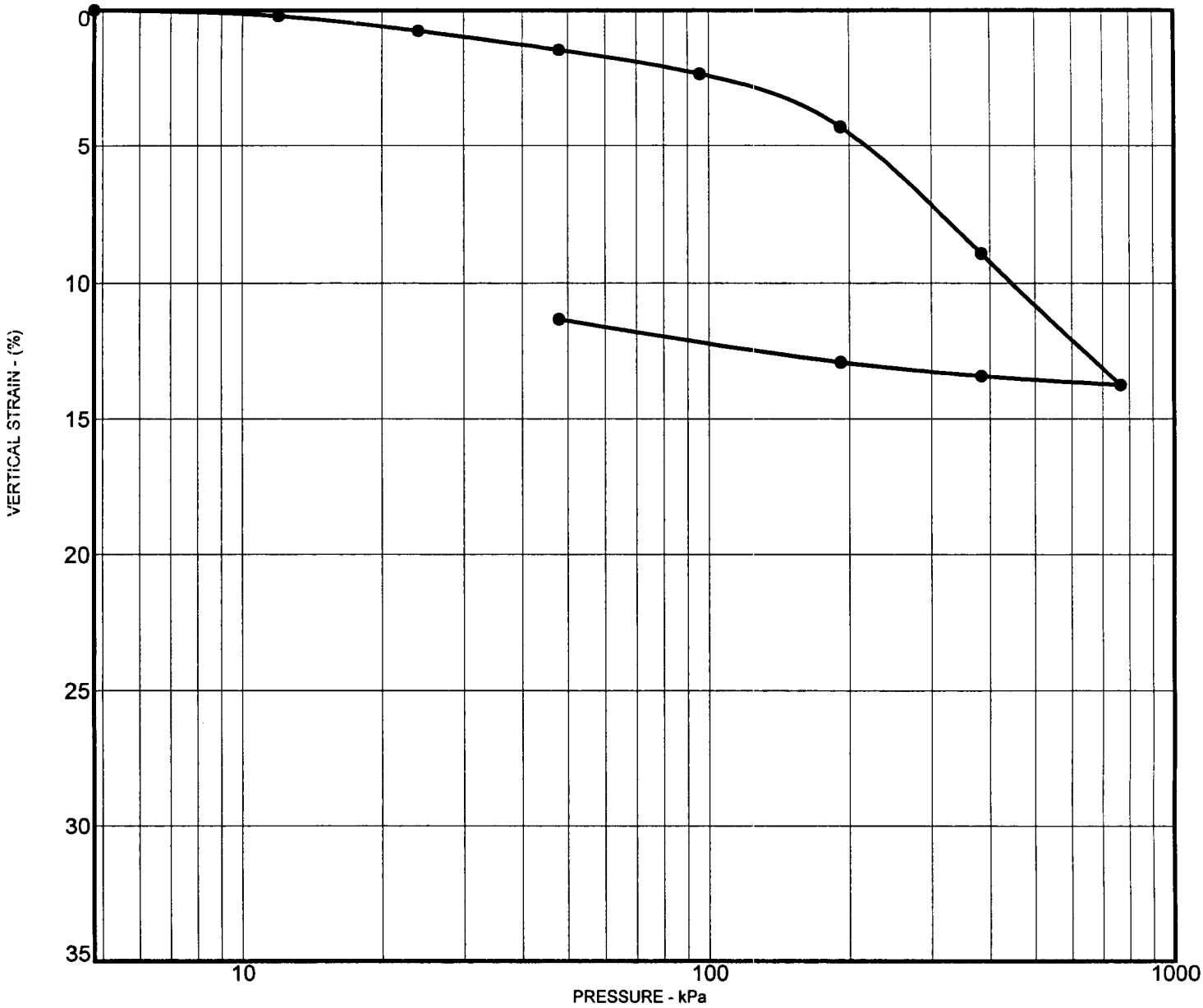
Boring Number:	SB-18-272
Sample Depth:	10.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	168.8	
Ring Weight	45.5	
Wet Wt.	123.3	
Wet + Tare		163
Dry + Tare		132.4
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	#VALUE!
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/24/00	14:00:00			0164	
01/25/00	8:15:00		4.8	0276	1.12
	18:30:00		12.0	0421	2.57
01/26/00	8:00:00		23.9	0599	4.35
	19:15:00		47.9	0779	6.15
01/27/00	11:10:00		95.8	0953	7.89
	20:00:00		191.5	1324	11.60
01/28/00	18:00:00		383.0	1847	16.83
01/29/00	16:50:00		766.1	2404	22.40
01/30/00	9:35:00		383.0	2370	22.06
	20:40:00		191.5	2330	21.66
01/31/00	18:15:00		47.9	2183	20.19



Sample	SB-18-272
Depth	13.72 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	12.8	14.5
Water content, %	39.9	32.4
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-357

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

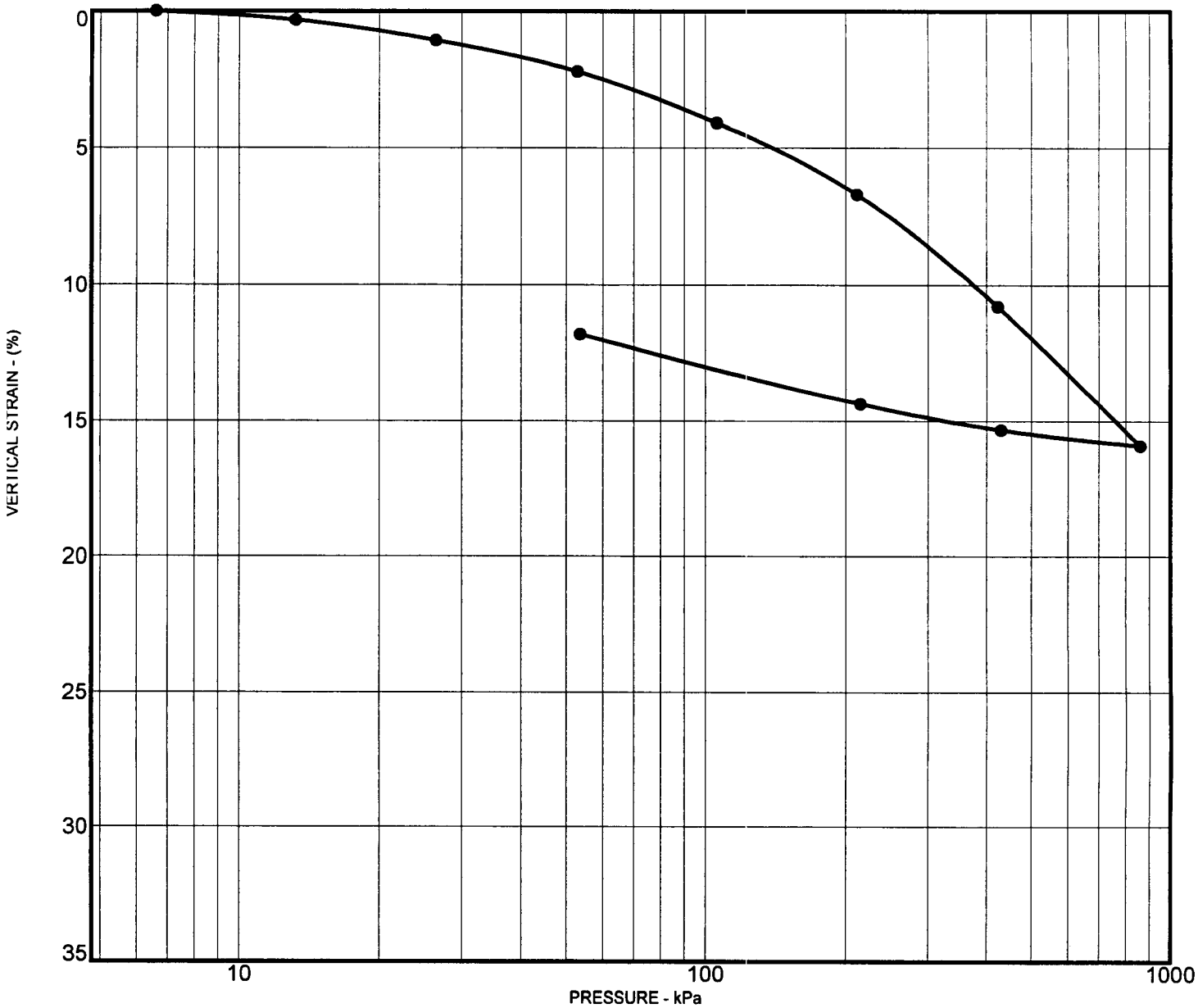
Boring Number:	SB-18-272
Sample Depth:	13.7 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	180.8	
Ring Weight	45	
Wet Wt.	135.8	
Wet + Tare		182.1
Dry + Tare		150.6
Tare Wt.		8.5

	Before Test (mm)	After Test (mm)
Sample Height	25.4	#VALUE!
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/24/00	16:00:00			0198	
01/25/00	8:15:00		4.8	0212	0.14
	11:45:00		12.0	0234	0.36
	18:25:00		23.9	0290	0.92
01/26/00	9:00:00		47.9	0361	1.63
	17:30:00		95.8	0451	2.53
01/27/00	15:20:00		191.5	0645	4.47
01/28/00	16:00:00		383.0	1105	9.07
01/29/00	16:50:00		766.1	1585	13.87
01/30/00	20:40:00		383.0	1552	13.54
01/31/00	8:50:00		191.5	1501	13.03
	18:25:00		47.9	1344	11.46



Sample	SB-18-272
Depth	24.38 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	12.9	14.7
Water content, %	40.2	36.5
Sample height, mm	25.4	22.4

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-359

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

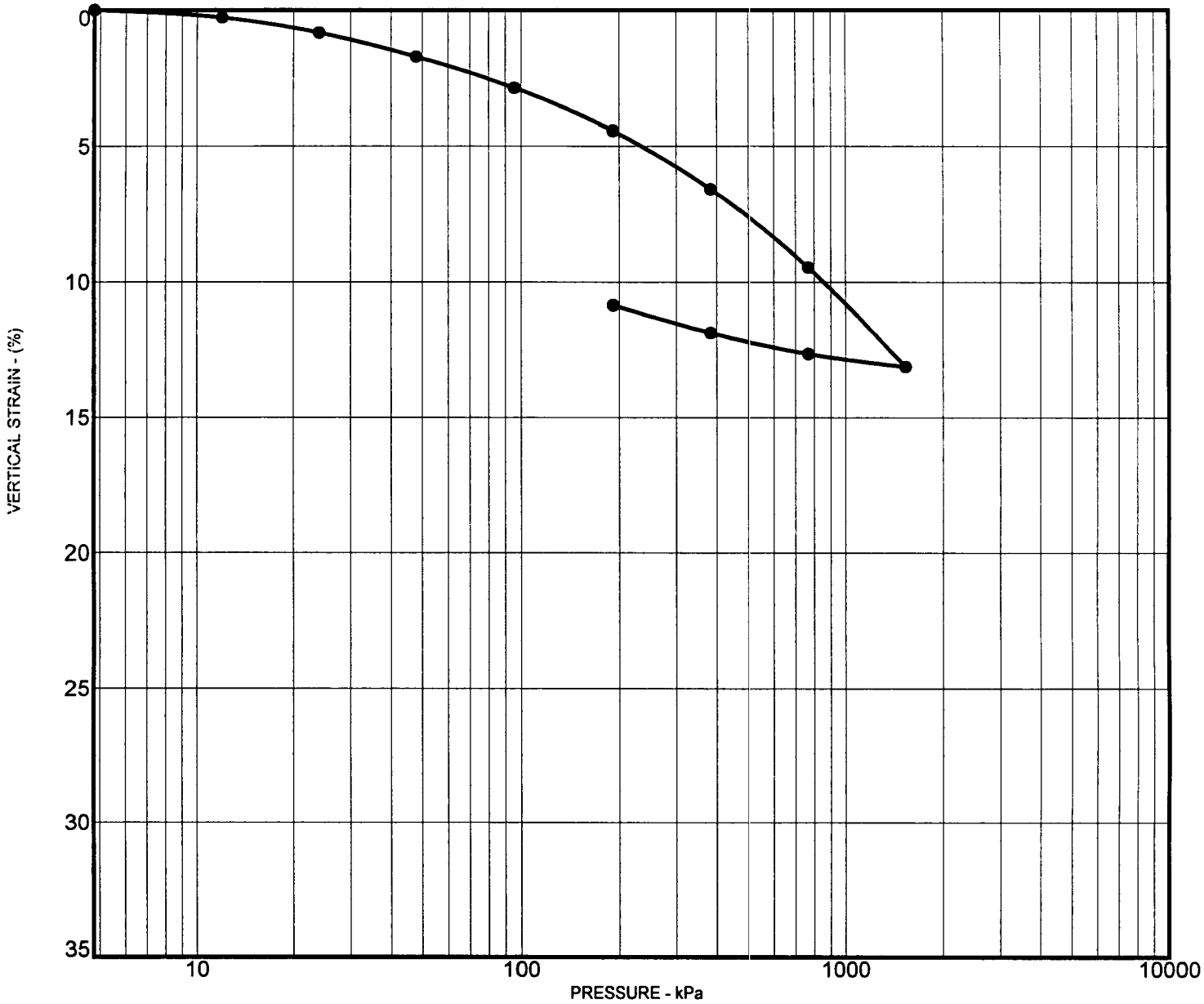
Boring Number:	SB-18-272
Sample Depth:	24.4 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.6	
Ring Weight	45.5	
Wet Wt.	137.1	
Wet + Tare		187.6
Dry + Tare		151.9
Tare Wt.		8.6

	Before Test (mm)	After Test (mm)
Sample Height	25.4	#VALUE!
Sample Diameter	49.0	

Water added at 6.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/25/00	10:53:00			0401	
	17:30:00		6.6	0383	-0.18
01/26/00	8:00:00		13.2	0416	0.15
	17:30:00		26.4	0491	0.90
	21:00:00		52.9	0607	2.06
01/27/00	8:15:00		105.8	0794	3.93
	18:55:00		211.5	1053	6.52
01/28/00	18:00:00		423.1	1462	10.61
01/29/00	14:45:00		859.9	1974	15.73
01/30/00	9:50:00		430.0	1915	15.14
	20:40:00		215.0	1820	14.19
01/31/00	18:30:00		53.6	1564	11.63



Sample	SB-18-272
Depth	48.77 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.3	16.0
Water content, %	32.4	26.8
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

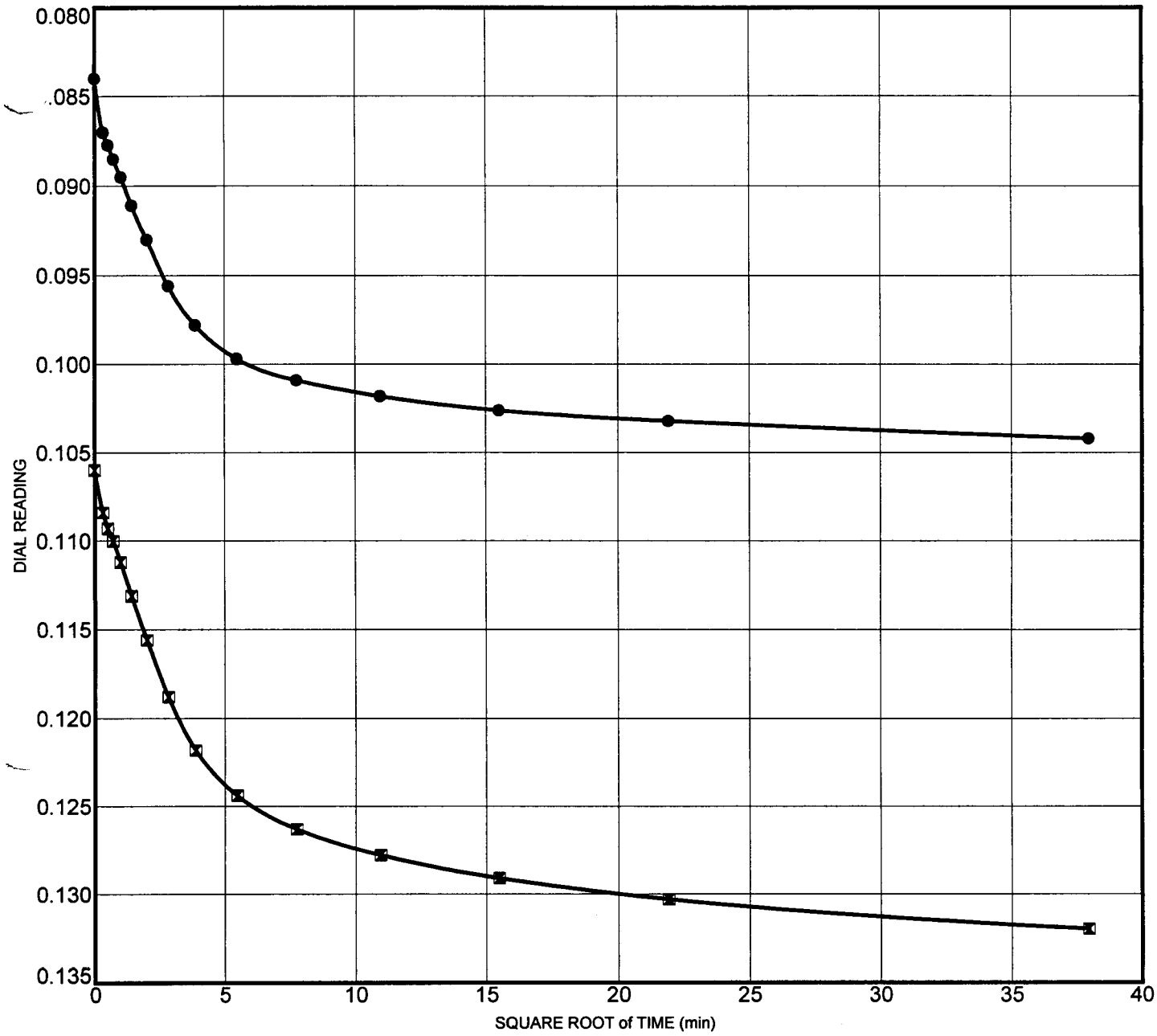
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-361



Sample	**SB-18-272**	
Depth	**48.8 m**	
Pressure (MPa)	● **0.38**	⊠ **0.77**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

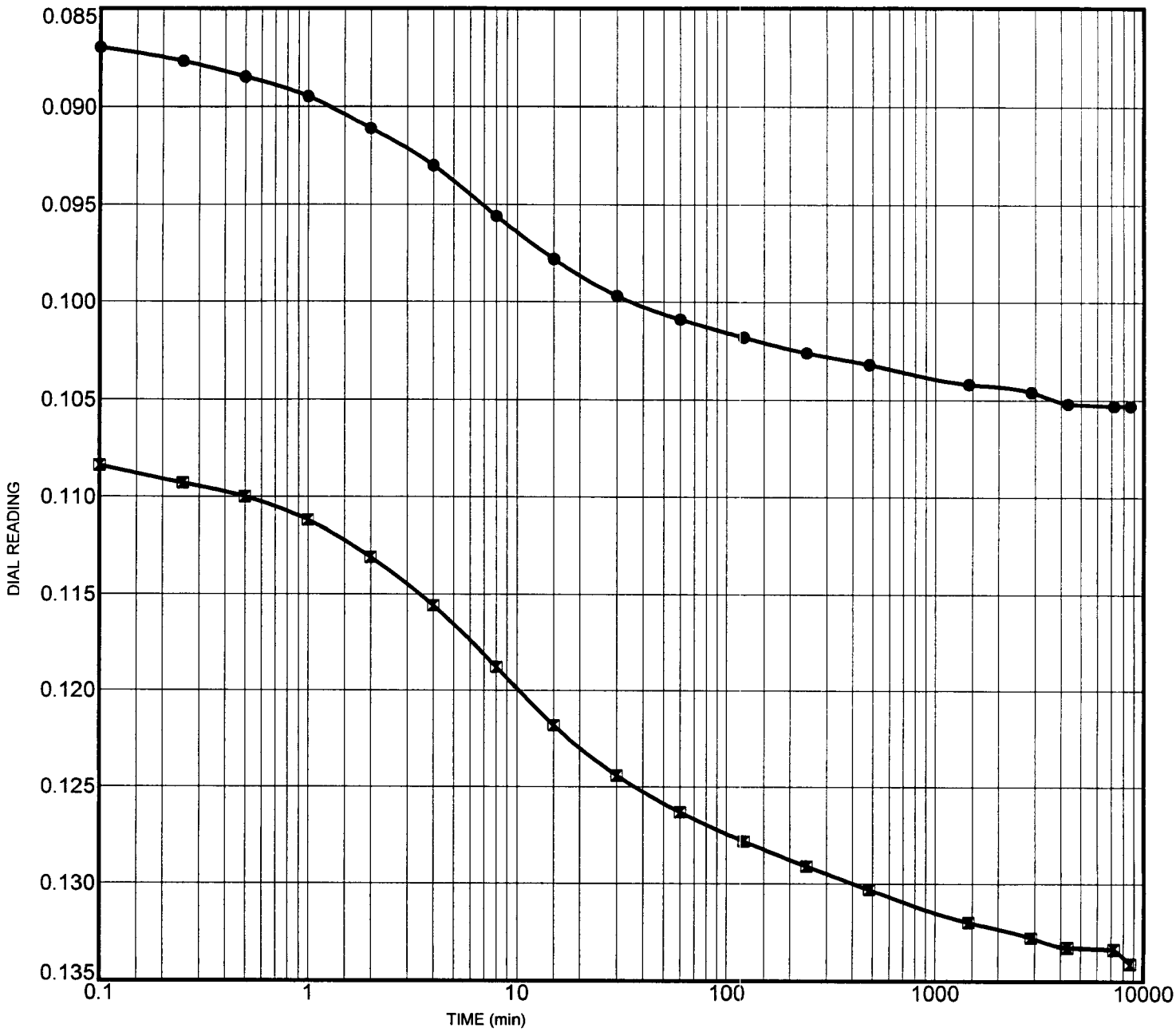
I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-362

TIME RATE (RTC) 2-M-B Z003SB2B.GPJ 6/1/00



Sample	**SB-18-272**	
Depth	**48.8 m**	
Pressure (kPa)	● **0.38**	⊠ **0.77**
Ca (m /day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

SECONDARY CONSOLIDATION

PLATE

K-363

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-18-272
Sample Depth:	48.8 m

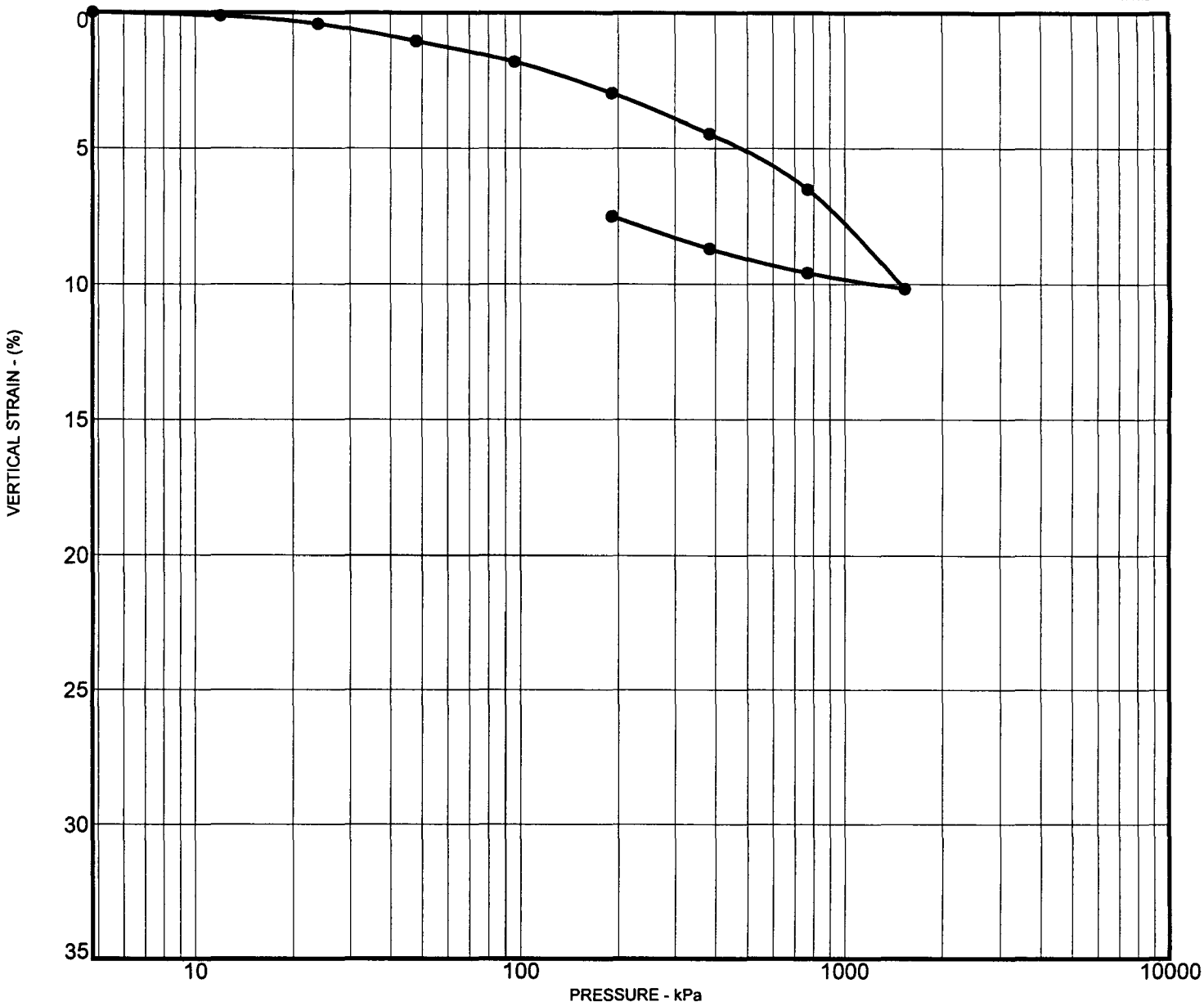
	Before Test (g)	After Test (g)
Wet Wt. + Ring	188.8	
Ring Weight	45.5	
Wet Wt.	143.3	
Wet + Tare		191.1
Dry + Tare		162.1
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	23.3
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/24/00	15:13:00			0383	
01/25/00	8:15:00		4.8	0395	0.12
	11:47:00		12.0	0423	0.40
	18:25:00		23.9	0480	0.97
01/26/00	9:00:00		47.9	0568	1.85
	16:30:00		95.8	0684	3.01
01/27/00	10:45:00		191.5	0840	4.57
	11:00:00	0:00:00	383.0	0840	4.57
	11:00:06	0:00:06		0870	
	11:00:15	0:00:15		0877	
	11:00:30	0:00:30		0885	
	11:01:00	0:01:00		0895	
	11:02:00	0:02:00		0911	
	11:04:00	0:04:00		0930	
	11:08:00	0:08:00		0956	
	11:15:00	0:15:00		0978	
	11:30:00	0:30:00		0997	
	12:00:00	1:00:00		1009	
	13:00:00	2:00:00		1018	
	15:00:00	4:00:00		1026	
	19:00:00	8:00:00		1032	
01/28/00	11:00:00	24:00:00		1042	
01/29/00	10:00:00	47:00:00		1046	
	16:50:00	55:50:00		1047	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/30/00	9:35:00	72:35:00		1052	
01/31/00	8:50:00	95:55:00		1052	
	16:50:00	103:55:00		1052	
02/01/00	7:45:00	118:50:00		1053	
	11:10:00	122:15:00	383.0	1053	6.70
	11:10:00	0:00:00	766.1	1060	6.77
	11:10:06	0:00:06		1084	
	11:10:15	0:00:15		1093	
	11:10:30	0:00:30		1100	
	11:11:00	0:01:00		1112	
	11:12:00	0:02:00		1131	
	11:14:00	0:04:00		1156	
	11:18:00	0:08:00		1188	
	11:25:00	0:15:00		1218	
	11:40:00	0:30:00		1244	
	12:10:00	1:00:00		1263	
	13:10:00	2:00:00		1278	
	15:10:00	4:00:00		1291	
	19:10:00	8:00:00		1303	
02/02/00	11:10:00	24:00:00		1320	
	14:20:00	27:10:00		1321	
	19:00:00	31:50:00		1323	
02/03/00	8:30:00	45:20:00		1328	
	17:20:00	54:10:00		1330	
02/04/00	7:30:00	68:20:00		1333	
	11:40:00	72:30:00		1334	
	17:35:00	78:25:00		1335	
02/06/00	15:45:00	100:35:00		1339	
02/07/00	8:20:00	117:10:00	766.1	1341	9.58
02/08/00	10:30:00		1532.2	1707	13.24
	16:30:00		766.1	1659	12.76
	19:00:00		383.0	1582	11.99
02/09/00	7:35:00		191.5	1480	10.97



Sample	SB-18-272
Depth	64.01 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.0	15.1
Water content, %	34.3	31.9
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

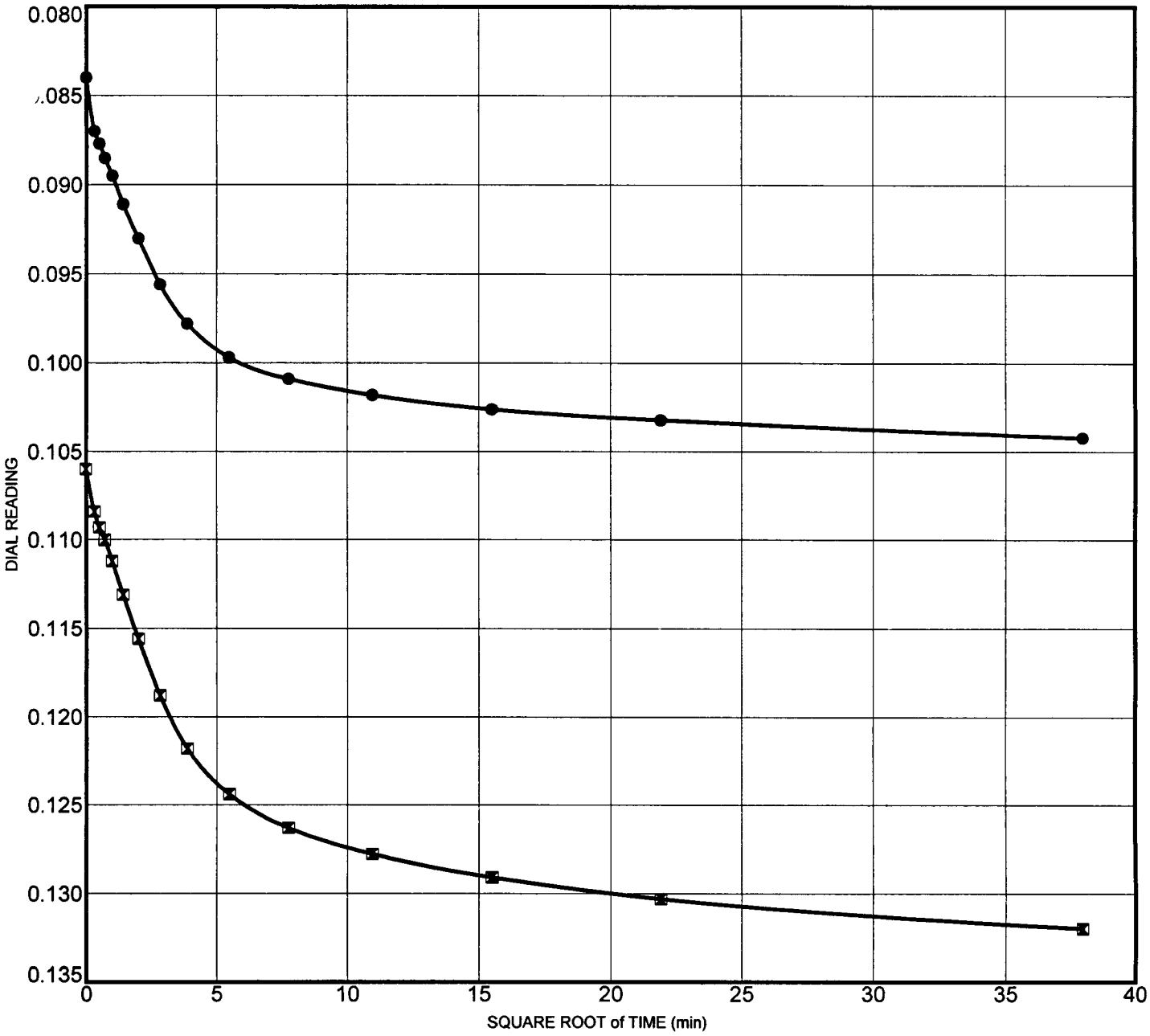
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-366



Sample	**SB-18-272**	
Depth	**48.8 m**	
Pressure (MPa)	● **0.38**	⊠ **0.77**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-367

TIME RATE (RTC) 2-M-B Z003SB2B.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-18-272
Sample Depth:	64.0 m

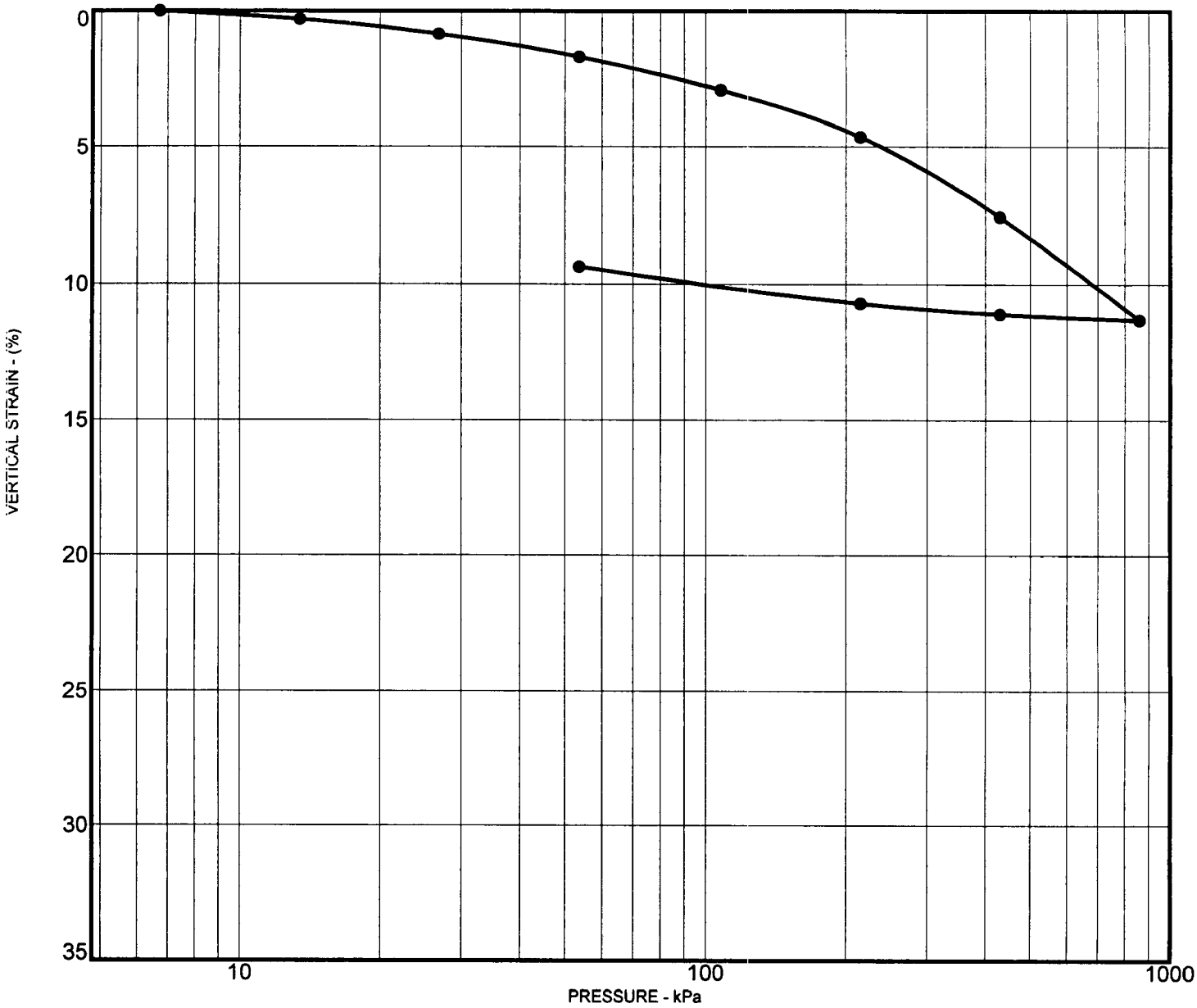
	Before Test (g)	After Test (g)
Wet Wt. + Ring	187.0	
Ring Weight	45	
Wet Wt.	142.0	
Wet + Tare		192.7
Dry + Tare		159
Tare Wt.		8.3

	Before Test (mm)	After Test (mm)
Sample Height	25.4	24.2
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/24/00	15:50:00			0193	
01/25/00	8:15:00		4.8	0097	-0.96
	11:47:00		12.0	0110	-0.83
	16:15:00		23.9	0140	-0.53
01/26/00	8:00:00		47.9	0204	0.11
	16:30:00		95.8	0281	0.88
01/27/00	10:45:00		191.5	0397	2.04
	11:05:00	0:00:00	383.0	0398	2.05
	11:05:06	0:00:06		0427	
	11:05:15	0:00:15		0432	
	11:05:30	0:00:30		0438	
	11:06:00	0:01:00		0445	
	11:07:00	0:02:00		0454	
	11:09:00	0:04:00		0467	
	11:13:00	0:08:00		0483	
	11:20:00	0:15:00		0494	
	11:35:00	0:30:00		0510	
	12:05:00	1:00:00		0519	
	13:05:00	2:00:00		0524	
	15:05:00	4:00:00		0529	
	19:05:00	8:00:00		0532	
01/28/00	11:05:00	24:00:00		0537	
01/29/00	18:00:00	47:00:00		0540	
	16:50:00	55:50:00		0541	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
01/30/00	9:35:00	72:35:00		0542	
01/31/00	8:50:00	95:55:00		0543	
	16:50:00	103:55:00		0545	
02/01/00	7:45:00	118:50:00		0545	
	11:15:00	122:15:00	383.0	0545	3.52
	11:15:00	0:00:00	766.1	0560	3.67
	11:15:06	0:00:06		0574	
	11:15:15	0:00:15		0579	
	11:15:30	0:00:30		0585	
	11:16:00	0:01:00		0593	
	11:17:00	0:02:00		0605	
	11:19:00	0:04:00		0622	
	11:23:00	0:08:00		0641	
	11:30:00	0:15:00		0661	
	11:45:00	0:30:00		0680	
	12:15:00	1:00:00		0694	
	13:15:00	2:00:00		0703	
	15:15:00	4:00:00		0712	
	19:15:00	8:00:00		0720	
02/02/00	11:15:00	24:00:00		0732	
	14:20:00	27:10:00		0732	
	19:00:00	31:50:00		0734	
02/03/00	8:30:00	45:20:00		0738	
	17:20:00	54:10:00		0740	
02/04/00	7:30:00	68:20:00		0743	
	11:40:00	72:30:00		0744	
	17:35:00	78:25:00		0745	
02/06/00	15:45:00	100:35:00		0749	
02/08/00	10:30:00		1532.2	1113	9.20
	16:30:00		766.1	1055	8.62
	19:00:00		383.0	0966	7.73
02/09/00	7:35:00		191.5	0848	6.55



Sample	SB-19-274
Depth	15.24 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	14.7	16.3
Water content, %	30.1	25.4
Sample height, mm	25.4	23.1

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

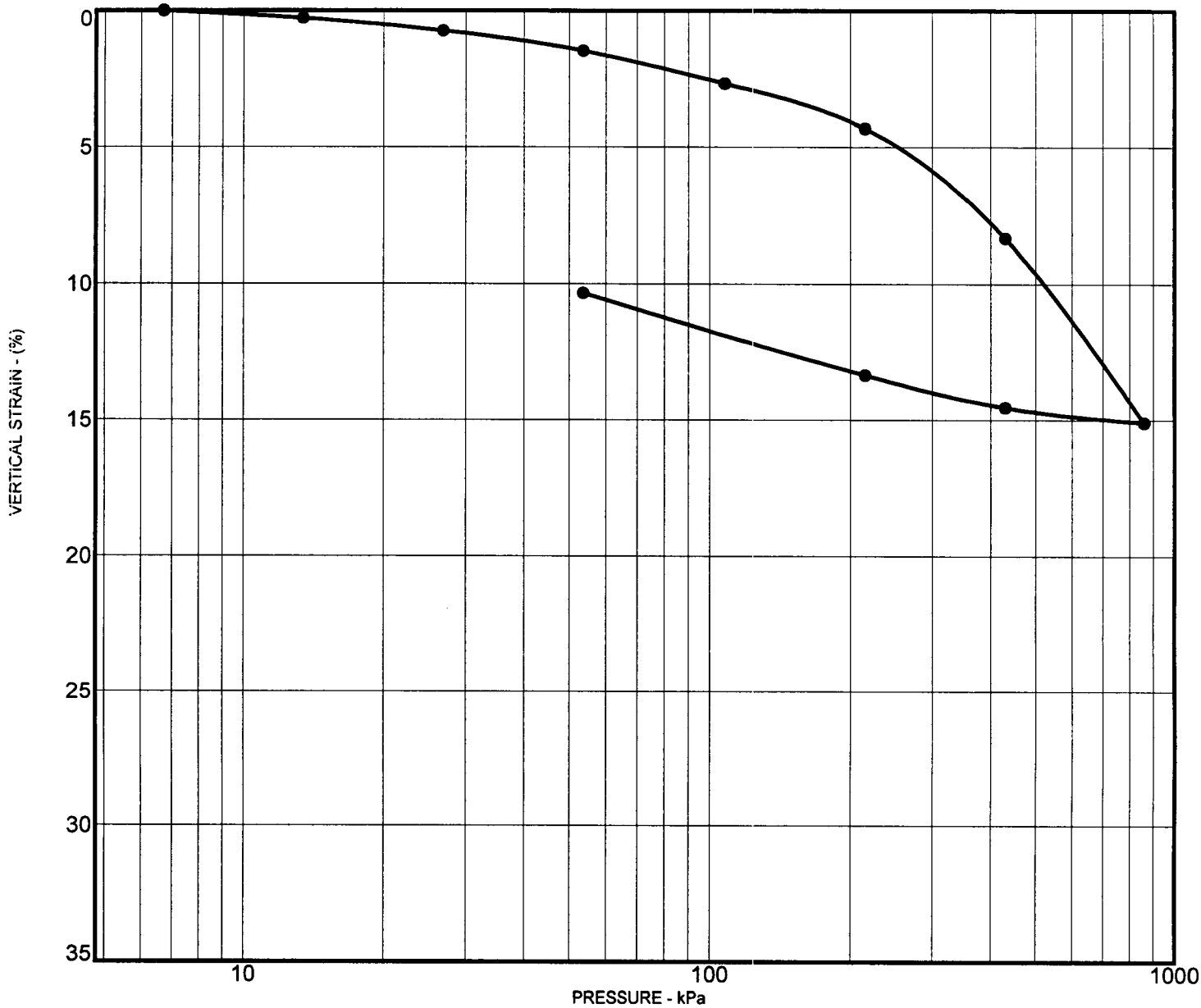
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-370

(This page left blank intentionally.)



Sample	SB-19-274
Depth	25.91 m
Classification	SC

	Initial	Final
Dry density, kN/m^3	12.1	13.5
Water content, %	45.1	38.6
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

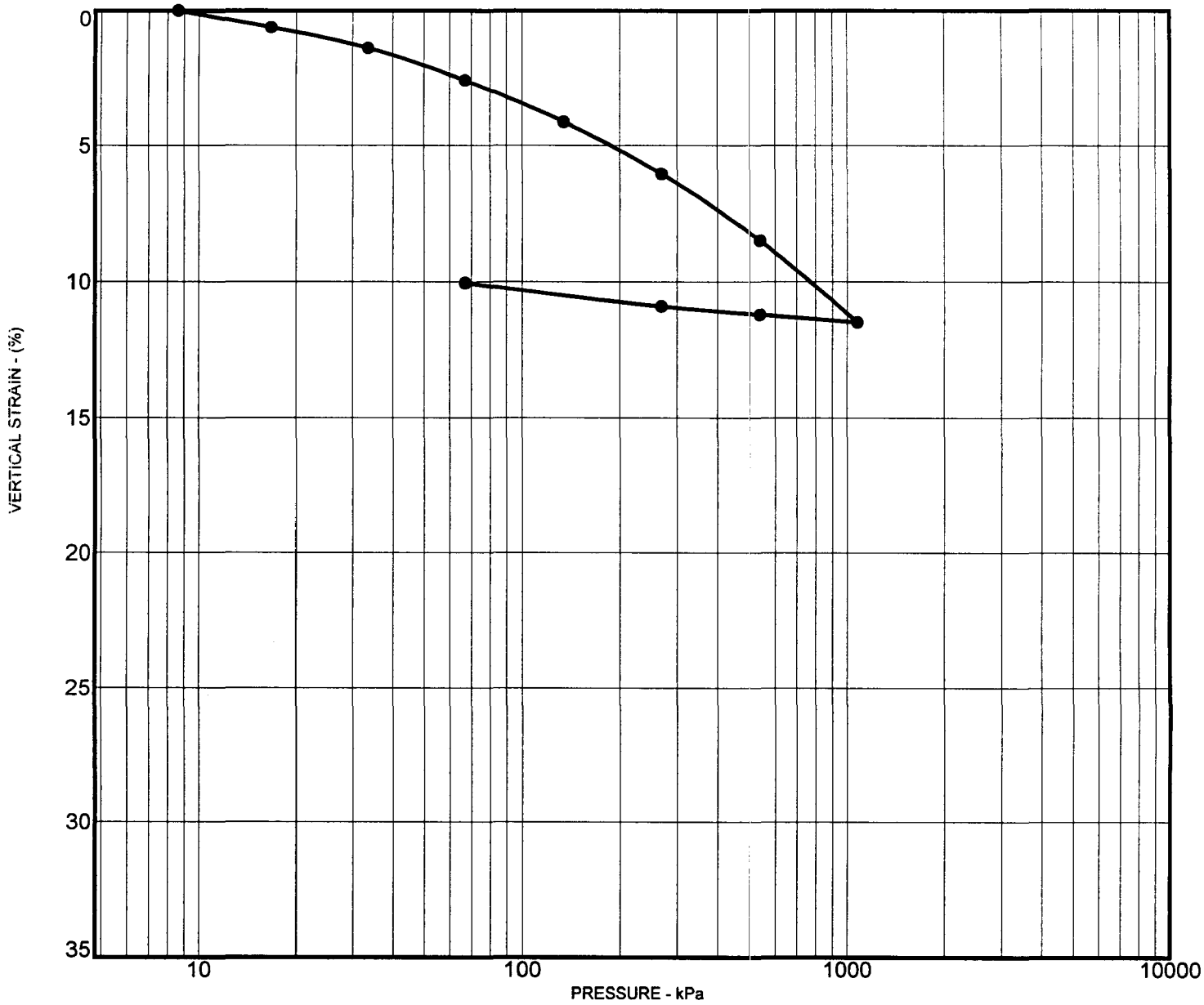
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-372

(This page left blank intentionally.)



Sample	SB-19-276
Depth	18.29 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.9	17.7
Water content, %	26.8	21.3
Sample height, mm	25.4	22.9

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-374

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

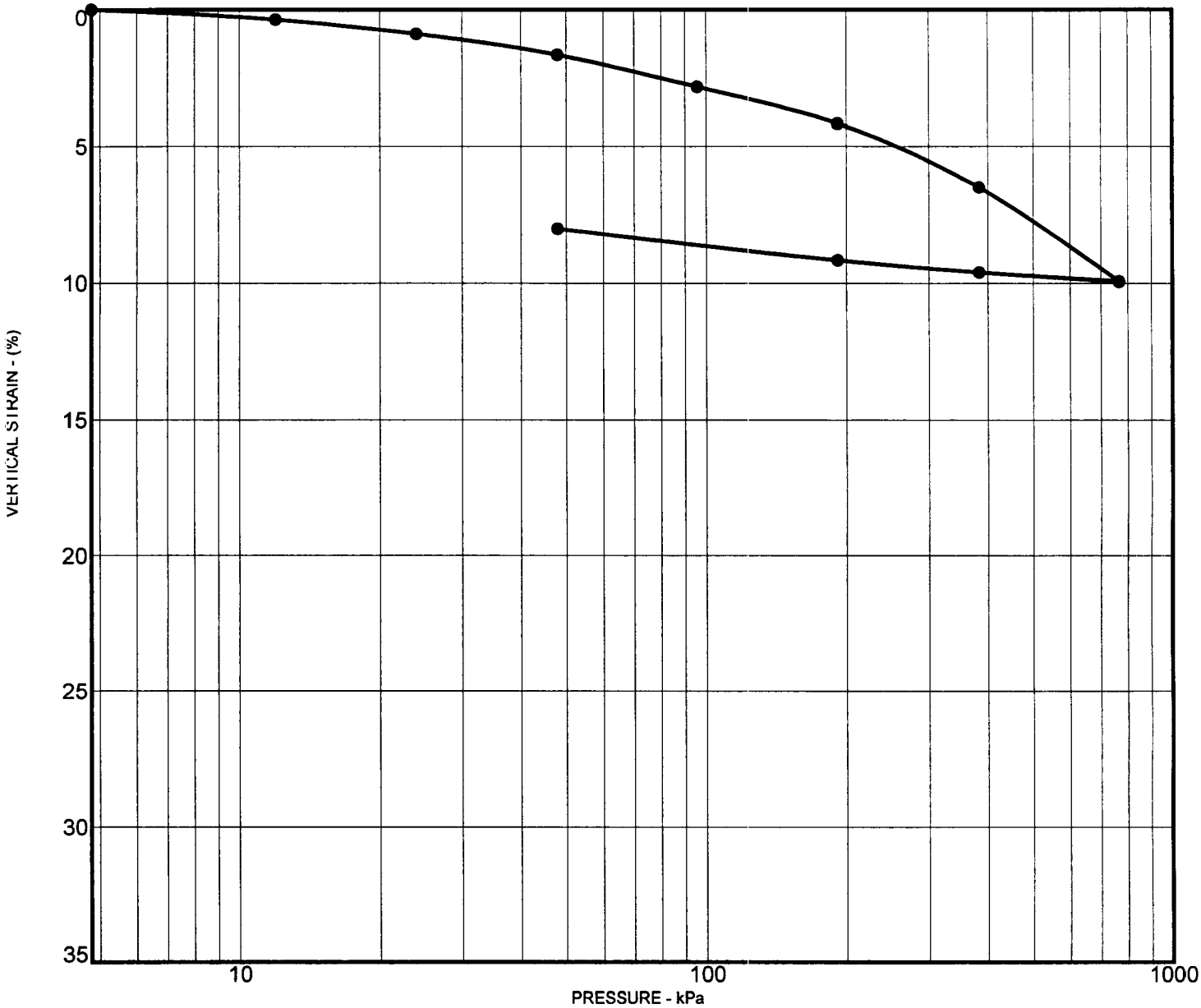
Boring Number:	SB-19-276
Sample Depth:	18.3 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	198.7	
Ring Weight	45.7	
Wet Wt.	153.0	
Wet + Tare		200.5
Dry + Tare		174.8
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	25.9
Sample Diameter	49.0	

Water added at 8.6 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/20/00	9:55:00			0200	
	18:30:00		8.6	0267	0.67
03/21/00	7:20:00		16.8	0330	1.30
	12:10:00		33.5	0408	2.08
	17:00:00		67.0	0529	3.29
03/22/00	8:00:00		134.5	0682	4.82
	17:00:00		268.6	0871	6.71
03/23/00	16:50:00		537.7	1117	9.17
03/24/00	17:50:00		1075.4	1417	12.17
03/25/00	8:55:00		537.7	1389	11.89
	11:20:00		268.6	1358	11.58
	13:05:00		67.0	1272	10.72



Sample	SB-19-276
Depth	24.38 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.1	16.4
Water content, %	29.4	26.3
Sample height, mm	25.4	23.4

KLEINFELDER

PROJECT NO. 35-8163-05

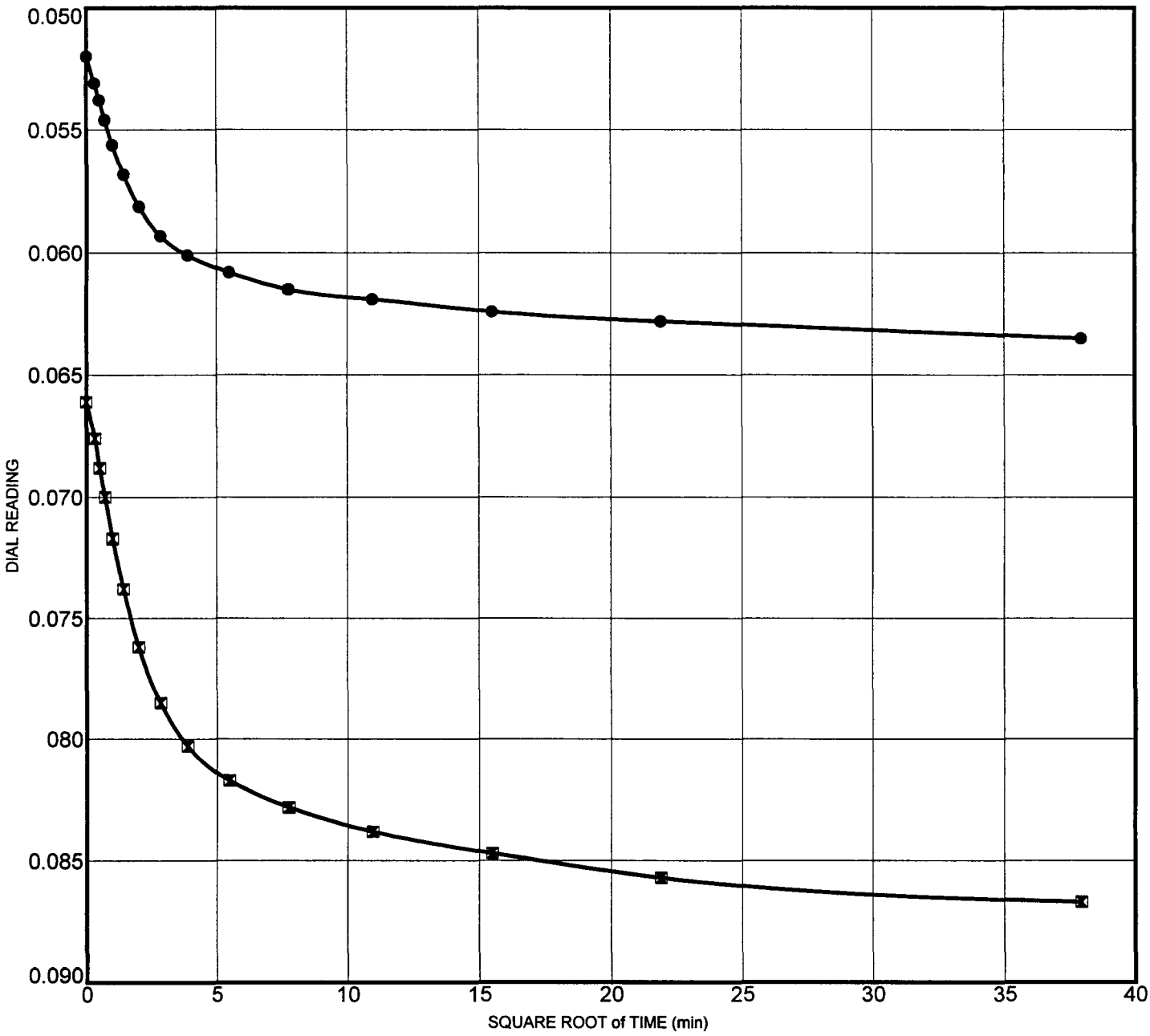
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-376



Sample	**SB-19-276**	
Depth	**24.4 m**	
Pressure (MPa)	● **0.19**	⊠ **0.38**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-377

TIME RATE (RTC) 2-M-B Z003SB2B.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-19-276
Sample Depth:	24.4 m

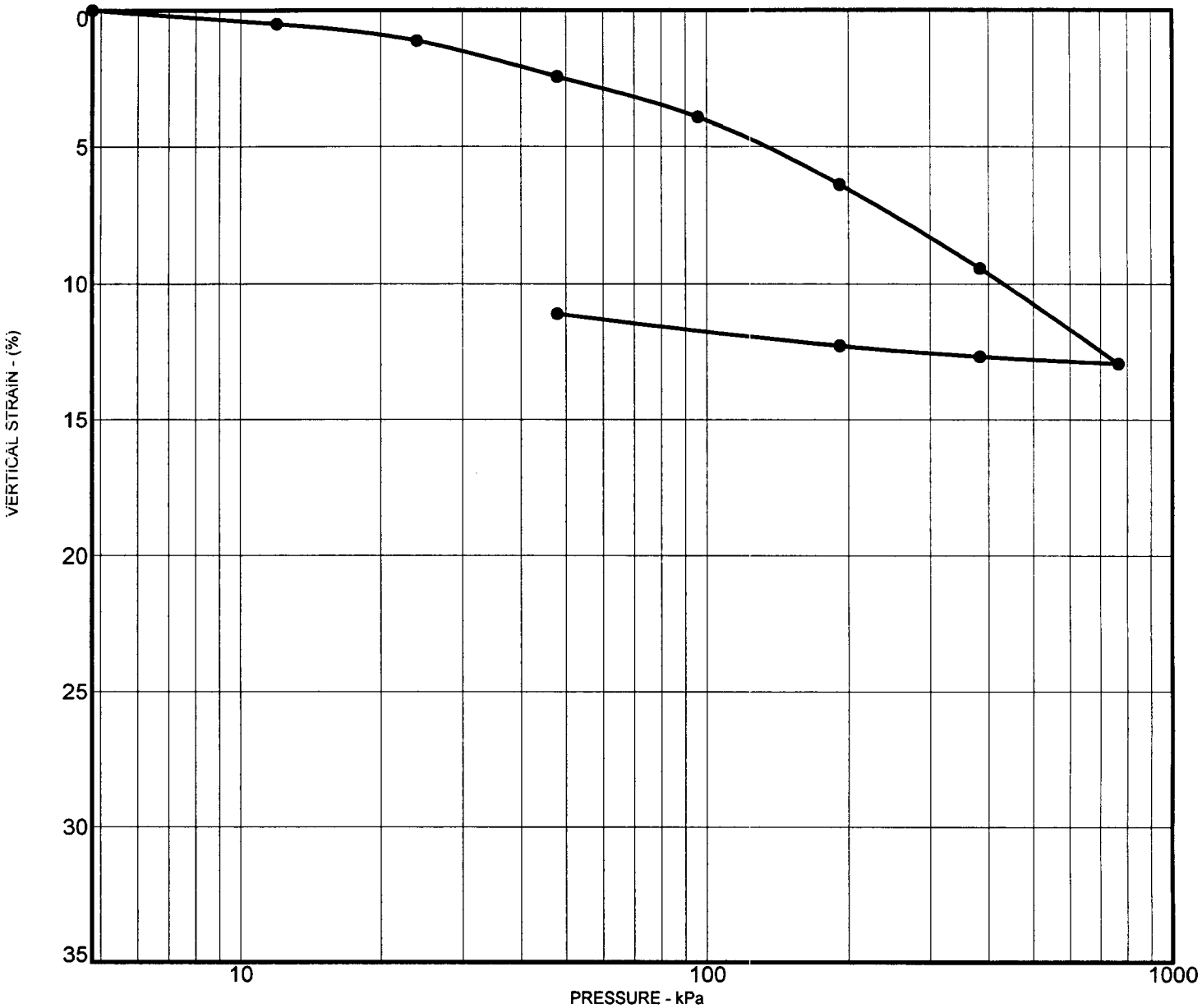
	Before Test (g)	After Test (g)
Wet Wt. + Ring	198.7	
Ring Weight	45.9	
Wet Wt.	152.8	
Wet + Tare		198.5
Dry + Tare		168.5
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	22.9
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
03/21/00	9:00:00			0207	
	11:00:00		4.8	0217	0.10
	14:30:00		12.0	0254	0.47
	17:20:00		23.9	0307	1.00
	21:00:00		47.9	0384	1.77
03/24/00	7:50:00		95.8	0502	2.95
	7:55:00	0:00:00	191.5	0520	
	7:55:06	0:00:06		0531	
	7:55:15	0:00:15		0538	
	7:55:30	0:00:30		0546	
	7:56:00	0:01:00		0556	
	7:57:00	0:02:00		0568	
	7:59:00	0:04:00		0581	
	8:03:00	0:08:00		0593	
	8:10:00	0:15:00		0601	
	8:25:00	0:30:00		0608	
	8:55:00	1:00:00		0615	
	9:55:00	2:00:00		0619	
	11:55:00	4:00:00		0624	
	15:55:00	8:00:00		0628	
03/25/00	7:55:00	24:00:00	191.5	0635	4.28
	9:22:00	0:00:00	383.0	0661	4.54
	9:22:06	0:00:06		0676	
	9:22:15	0:00:15		0688	

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
	9:22:30	0:00:30		0700	
	9:23:00	0:01:00		0717	
	9:24:00	0:02:00		0738	
	9:26:00	0:04:00		0762	
	9:30:00	0:08:00		0785	
	9:37:00	0:15:00		0803	
	9:52:00	0:30:00		0817	
	10:22:00	1:00:00		0828	
	11:22:00	2:00:00		0838	
	13:22:00	4:00:00		0847	
	17:22:00	8:00:00		0857	
03/26/00	9:22:00	24:00:00	383.0	0867	6.60
03/27/00	14:40:00		766.1	1211	10.04
	19:30:00		383.0	1178	9.71
03/28/00	8:15:00		191.5	1133	9.26
	11:55:00		47.9	1018	8.11



Sample	SB-19-279
Depth	1.37 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	13.8	15.6
Water content, %	30.9	27.8
Sample height, mm	25.4	22.6

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-380

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

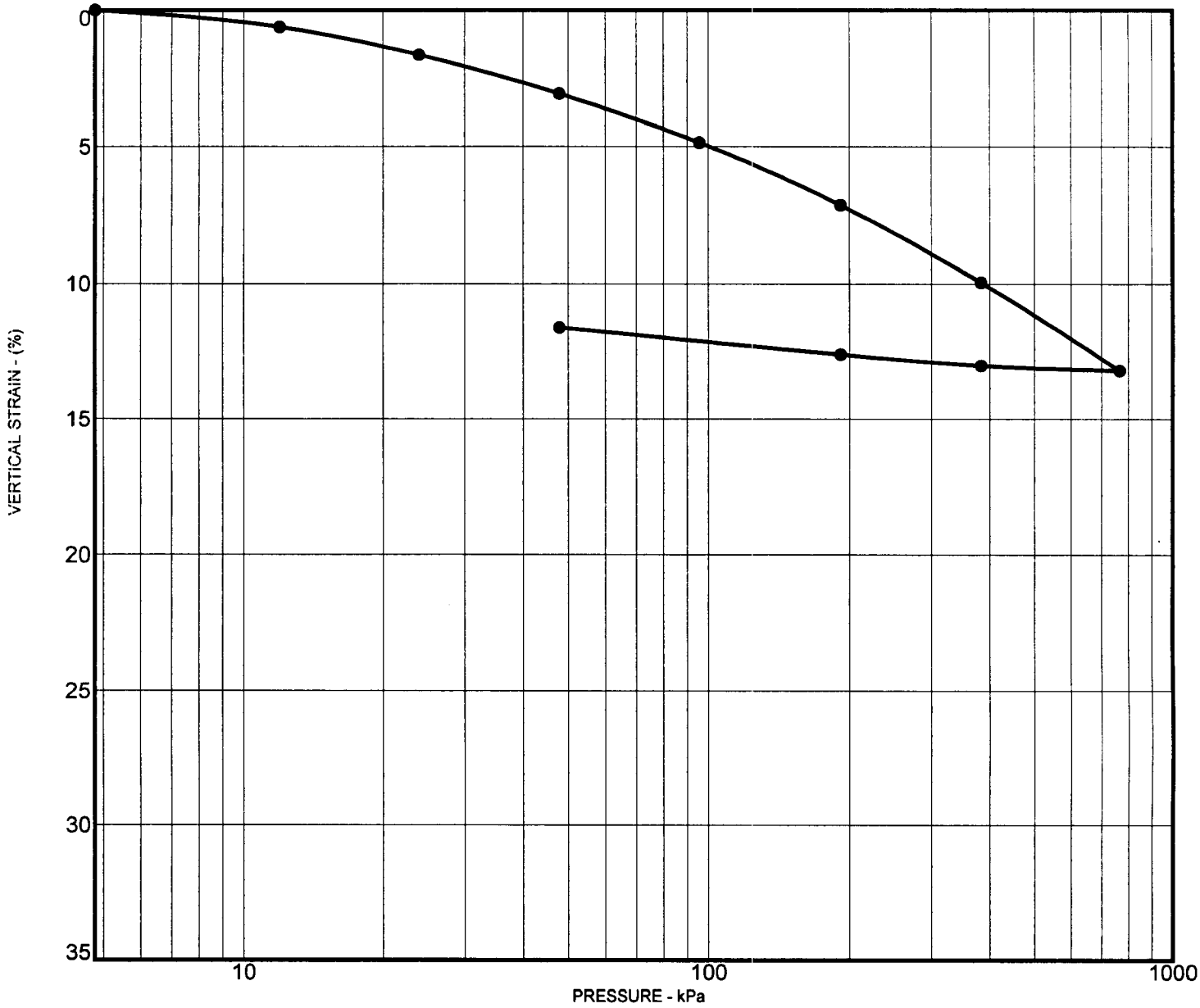
Boring Number:	SB-19-279
Sample Depth:	1.5 m

	Before Test (g)	After Test (g)
Wet Wt. + Ring	182.7	
Ring Weight	45.7	
Wet Wt.	137.0	
Wet + Tare		187.9
Dry + Tare		158.8
Tare Wt.		8.4

	Before Test (mm)	After Test (mm)
Sample Height	25.4	26.0
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/21/00	15:40:00			0228	
	15:50:00		4.8	0237	0.09
04/22/00	9:20:00		12.0	0289	0.61
	13:40:00		23.9	0351	1.23
04/23/00	9:30:00		47.9	0483	2.55
	17:10:00		95.8	0631	4.03
04/24/00	11:00:00		191.5	0875	6.47
04/25/00	8:15:00		383.0	1180	9.52
04/26/00	11:35:00		766.1	1533	13.05
04/27/00	7:00:00		383.0	1504	12.76
	17:00:00		191.5	1464	12.36
04/28/00	8:20:00		47.9	1346	11.18



Sample	SB-19-279
Depth	6.71 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	14.1	16.0
Water content, %	33.1	26.8
Sample height, mm	25.4	22.4

KLEINFELDER

PROJECT NO. 35-8163-05

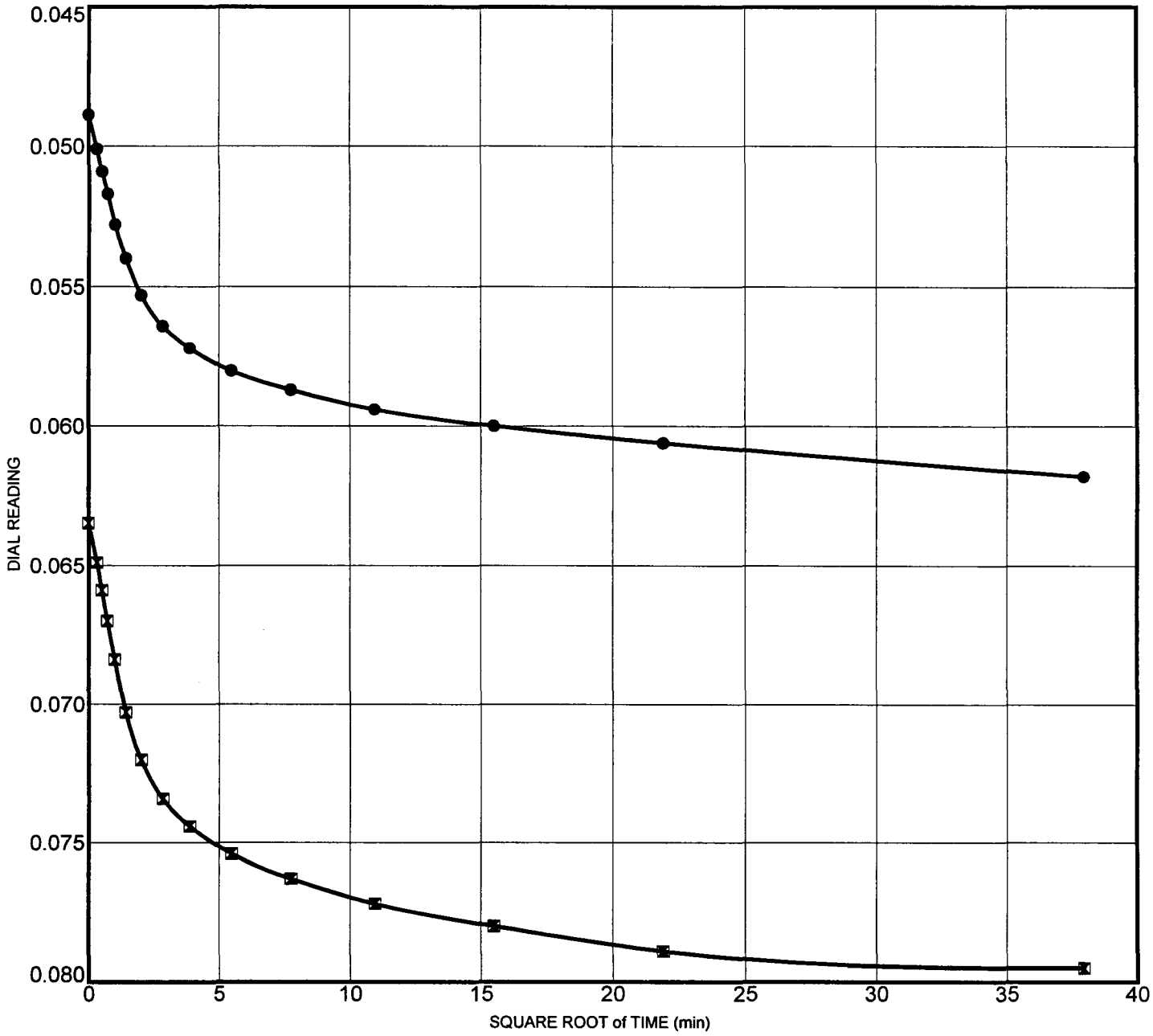
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-382



Sample	**SB-19-279**	
Depth	**6.7 m**	
Pressure (MPa)	● **0.05**	⊠ **0.10**
Cv (m^2/day)		

KLEINFELDER

PROJECT NO. **35-8163-05**

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

K-383

TIME RATE (RTC) 2-M-B Z003SB2B.GPJ 6/1/00

Kleinfelder, Inc.
Consolidation Test Data

Legacy Parkway **Project Number: 35-8163-05**

Boring Number:	SB-19-279
Sample Depth:	6.7 m

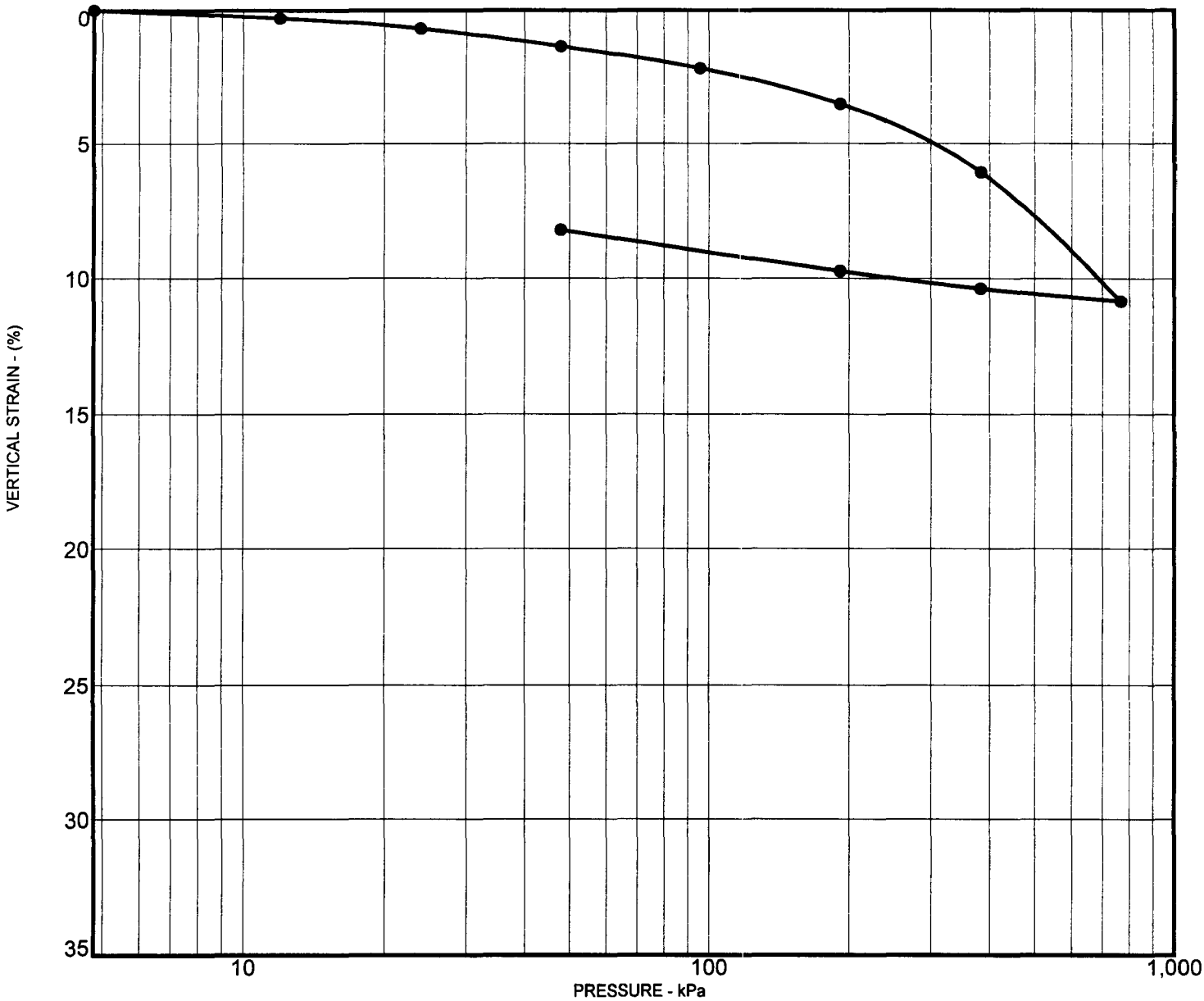
	Before Test (g)	After Test (g)
Wet Wt. + Ring	187.9	
Ring Weight	45.7	
Wet Wt.	142.2	
Wet + Tare		189
Dry + Tare		160.4
Tare Wt.		7.9

	Before Test (mm)	After Test (mm)
Sample Height	25.4	22.0
Sample Diameter	49.0	

Water added at 4.8 kPa.
* Elapsed Time shown only for time rates.

Date	Time (HH:MM:SS)	Elapsed Time* (HH:MM:SS)	Applied Stress (kPa)	Dial Reading	Strain (%)
04/21/00	15:45:00			0270	
	9:20:00		4.8	0309	0.39
	12:55:00		12.0	0372	1.02
04/23/00	8:00:00		23.9	0475	2.05
	8:06:00	0:00:00	47.9	0489	2.19
	8:06:06	0:00:06		0501	
	8:06:15	0:00:15		0509	
	8:06:30	0:00:30		0517	
	8:07:00	0:01:00		0528	
	8:08:00	0:02:00		0540	
	8:10:00	0:04:00		0553	
	8:14:00	0:08:00		0564	
	8:21:00	0:15:00		0572	
	8:36:00	0:30:00		0580	
	9:06:00	1:00:00		0587	
	10:06:00	2:00:00		0594	
	12:06:00	4:00:00		0600	
	16:06:00	8:00:00		0606	
04/24/00	8:06:00	24:00:00	47.9	0618	3.48
	8:03:00	0:00:00	95.8	0635	3.65
	8:03:06	0:00:06		0649	
	8:03:15	0:00:15		0659	
	8:03:30	0:00:30		0670	
	8:04:00	0:01:00		0684	

(This page left blank intentionally.)



Sample	**RB-406**
Depth	**4.57 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**13.4**	**14.7**
Water content, %	**35.2**	**31.9**
Sample height, mm	**25.4**	**23.4**

KLEINFELDER

PROJECT NO. **35-8163-05**

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-859

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

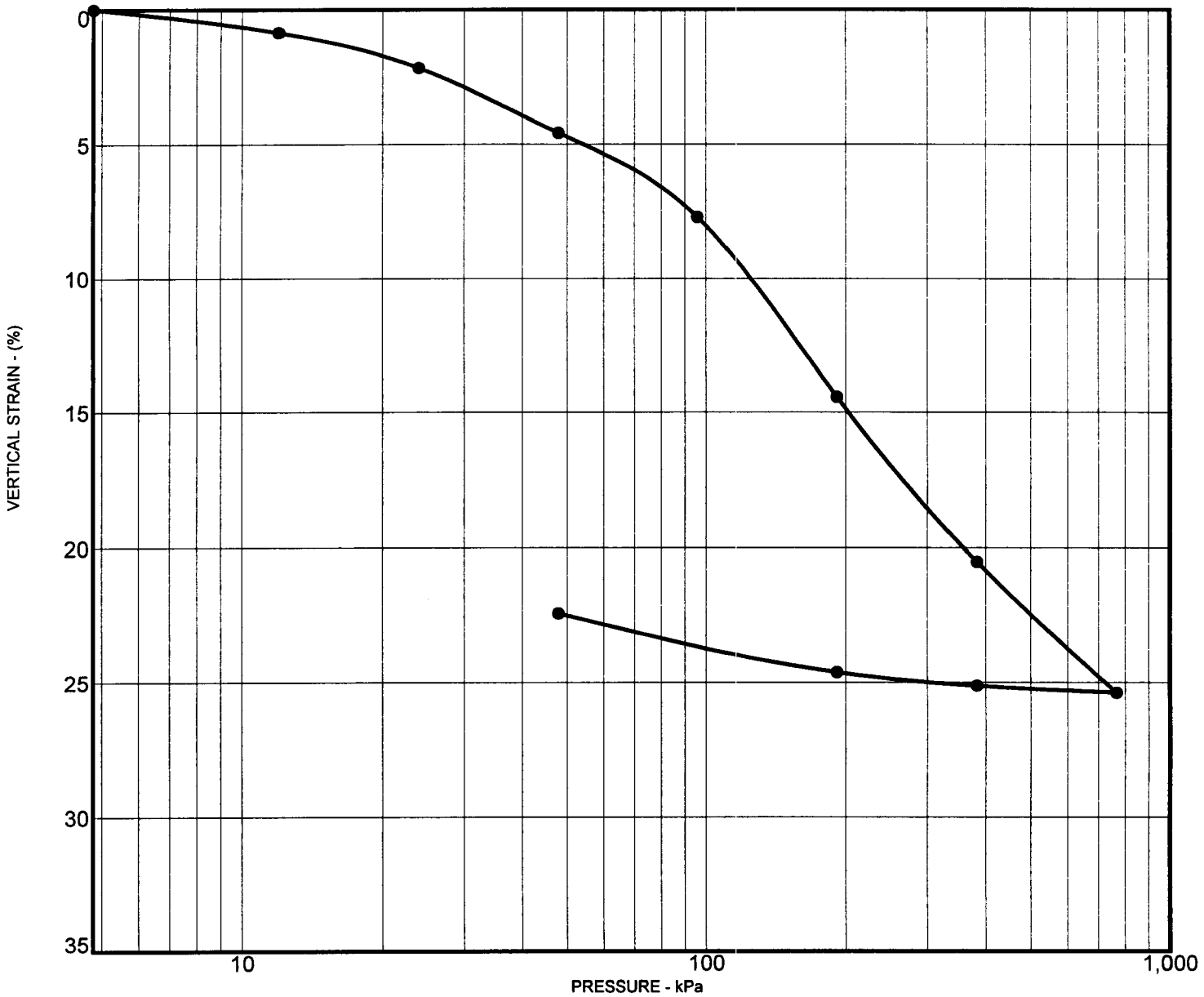
(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	RB-413
Depth	7.62 m
Classification	CH

	Initial	Final
Dry density, kN/m^3	10.4	13.4
Water content, %	58.7	39.5
Sample height, mm	25.4	19.8

KLEINFELDER

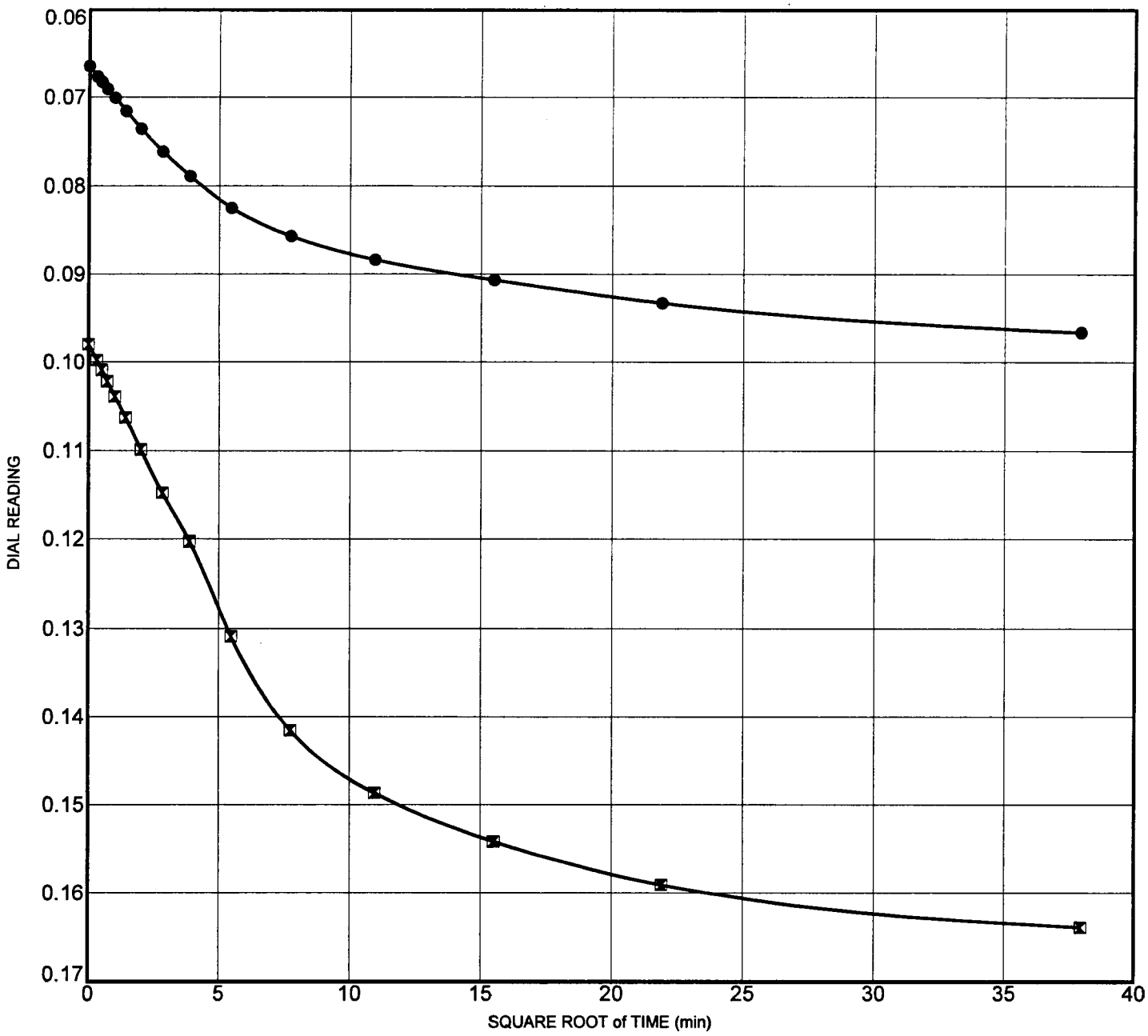
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-880



Sample	**RB-413**	
Depth	**7.6 m**	
Pressure (MPa)	● **0.10**	⊠ **0.19**
Cv (m^2/day)		

KLEINFELDER

I-215 to I-15/US 89 Interchange

TIME RATE CONSOLIDATION

PLATE

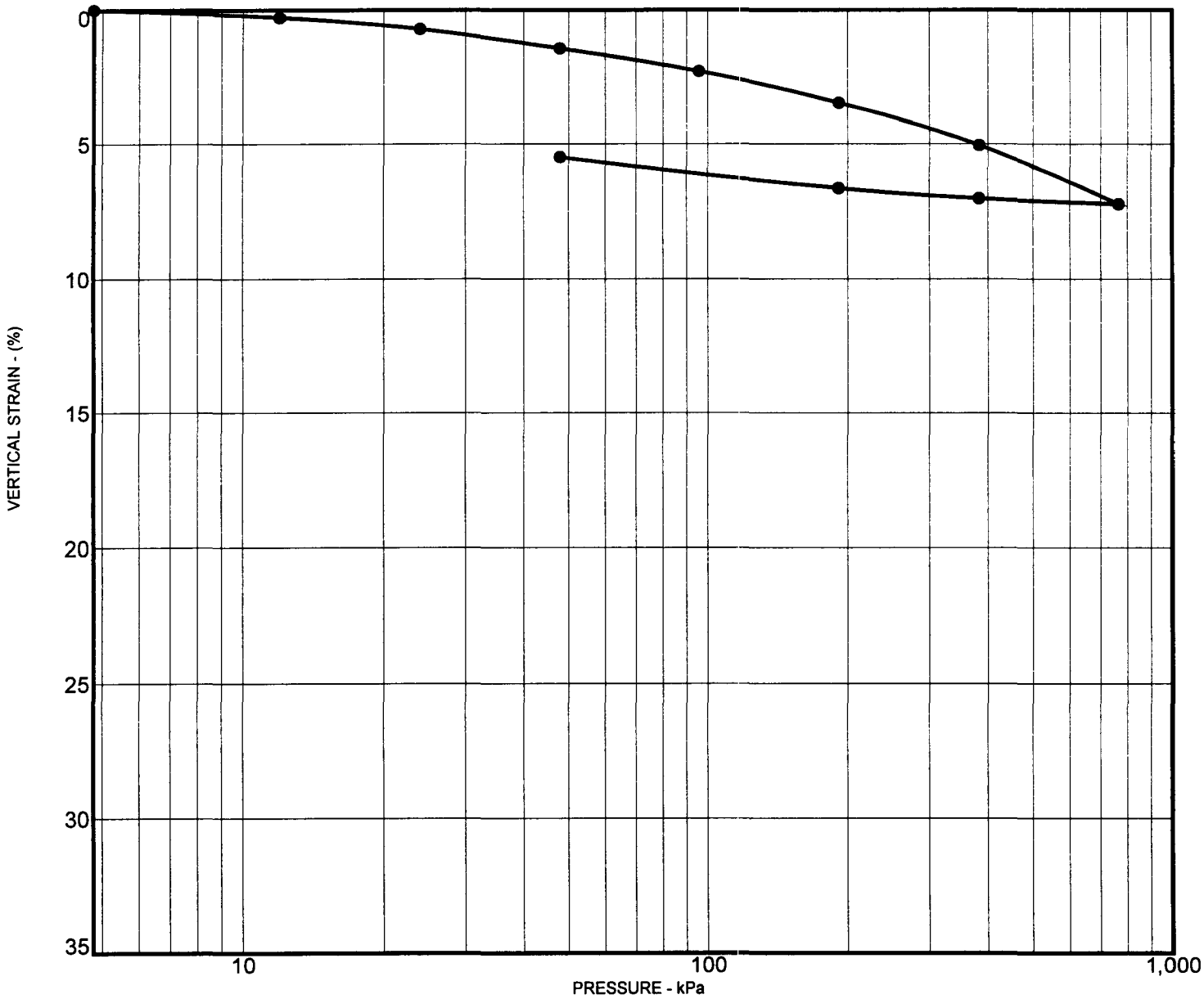
K-881

PROJECT NO. **35-8163-05**

TIME RATE (RTC) 2-M-B Z003SUP.GPJ 6/1/00

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	**RB-414**
Depth	**1.52 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**15.8**	**16.7**
Water content, %	**24.7**	**24.4**
Sample height, mm	**25.4**	**24.1**

KLEINFELDER

PROJECT NO. **35-8163-05**

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-884

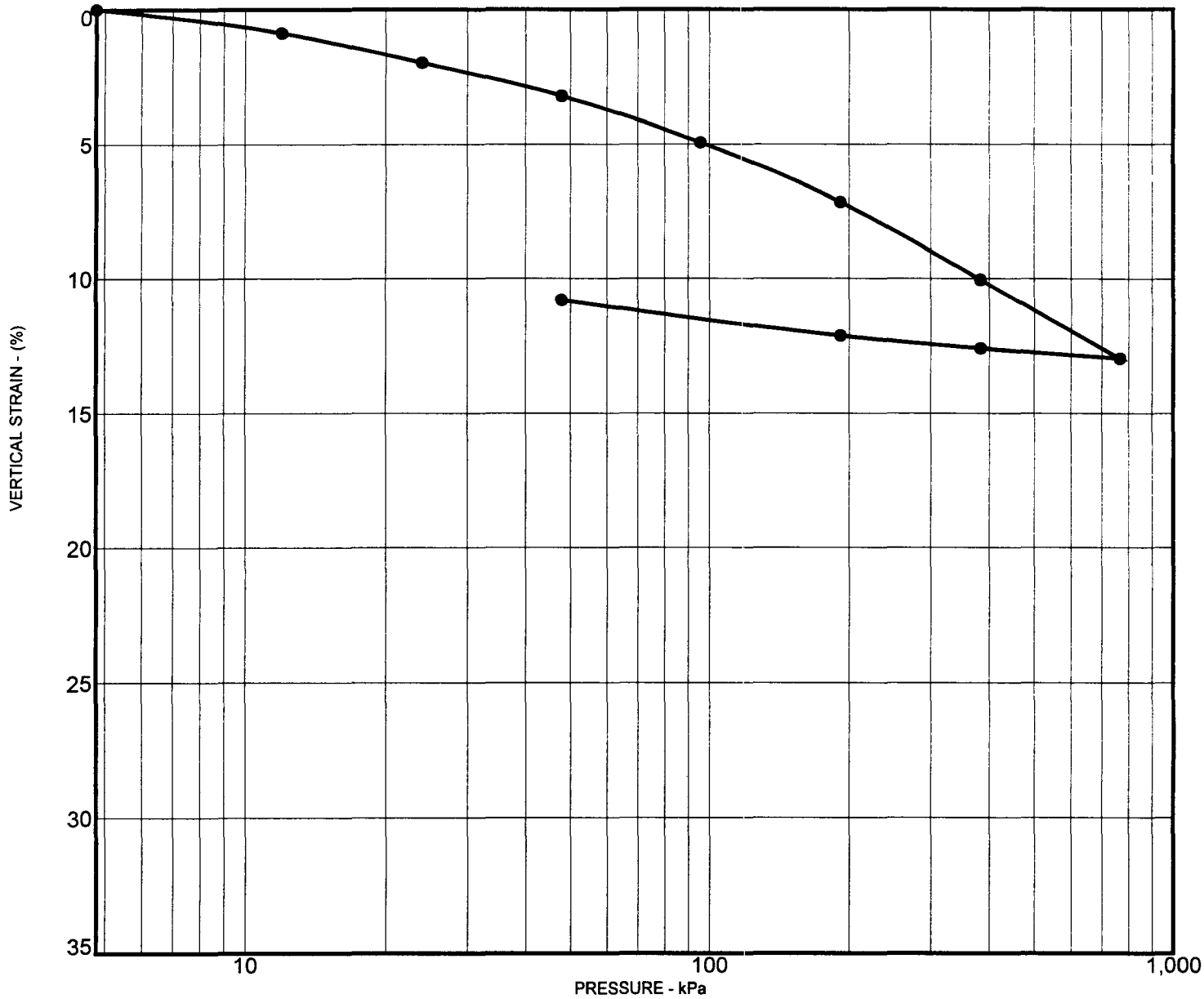
(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	**RB-418**
Depth	**1.52 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**14.3**	**16.1**
Water content, %	**28.4**	**25.7**
Sample height, mm	**25.4**	**22.6**

KLEINFELDER

PROJECT NO. **35-8163-05**

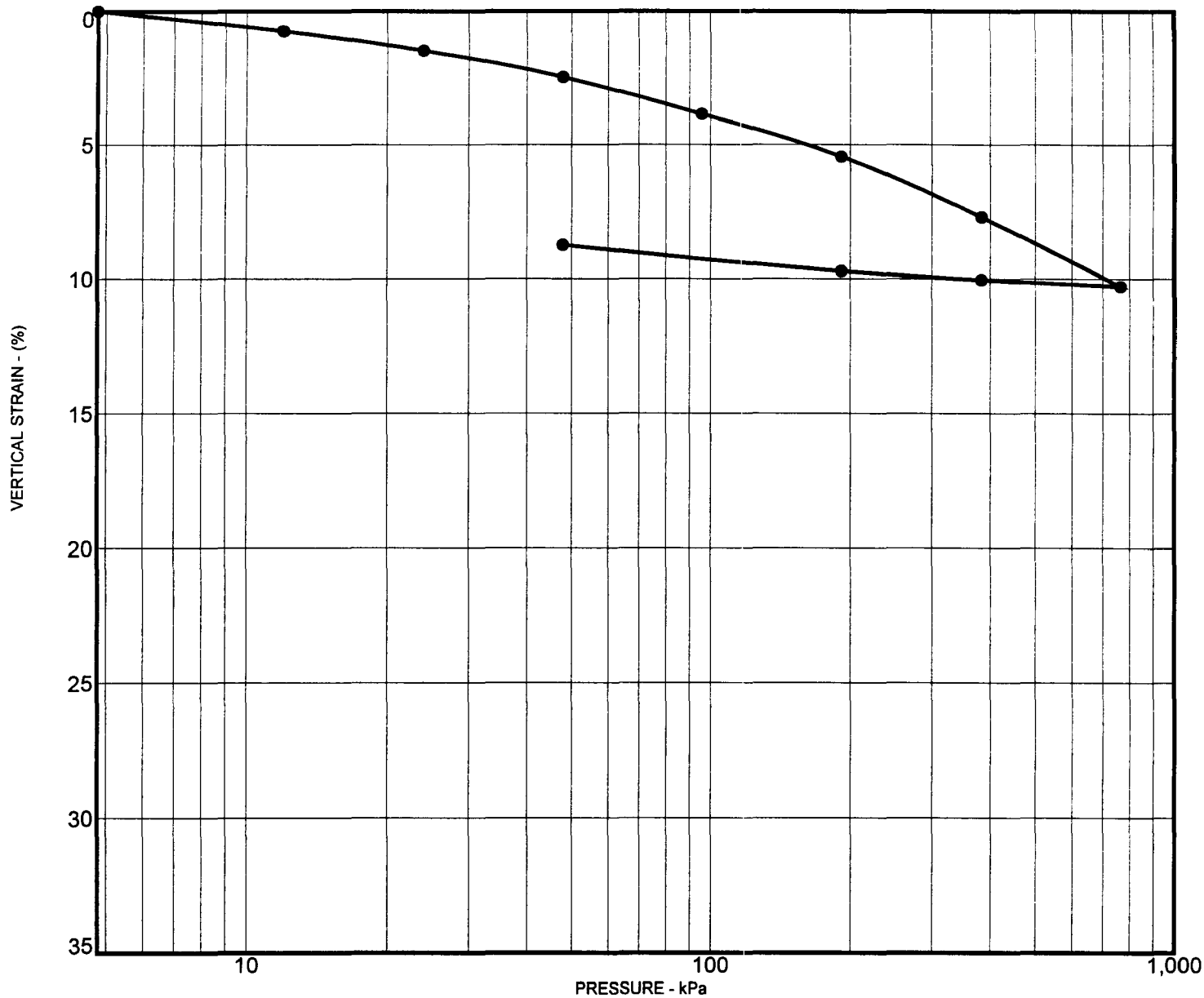
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-890

(This page left blank intentionally.)



Sample	**RB-418**
Depth	**4.57 m**
Classification	**SM**

	Initial	Final
Dry density, kN/m^3	**13.4**	**14.8**
Water content, %	**36.0**	**33.2**
Sample height, mm	**25.4**	**23.1**

KLEINFELDER

PROJECT NO. **35-8163-05**

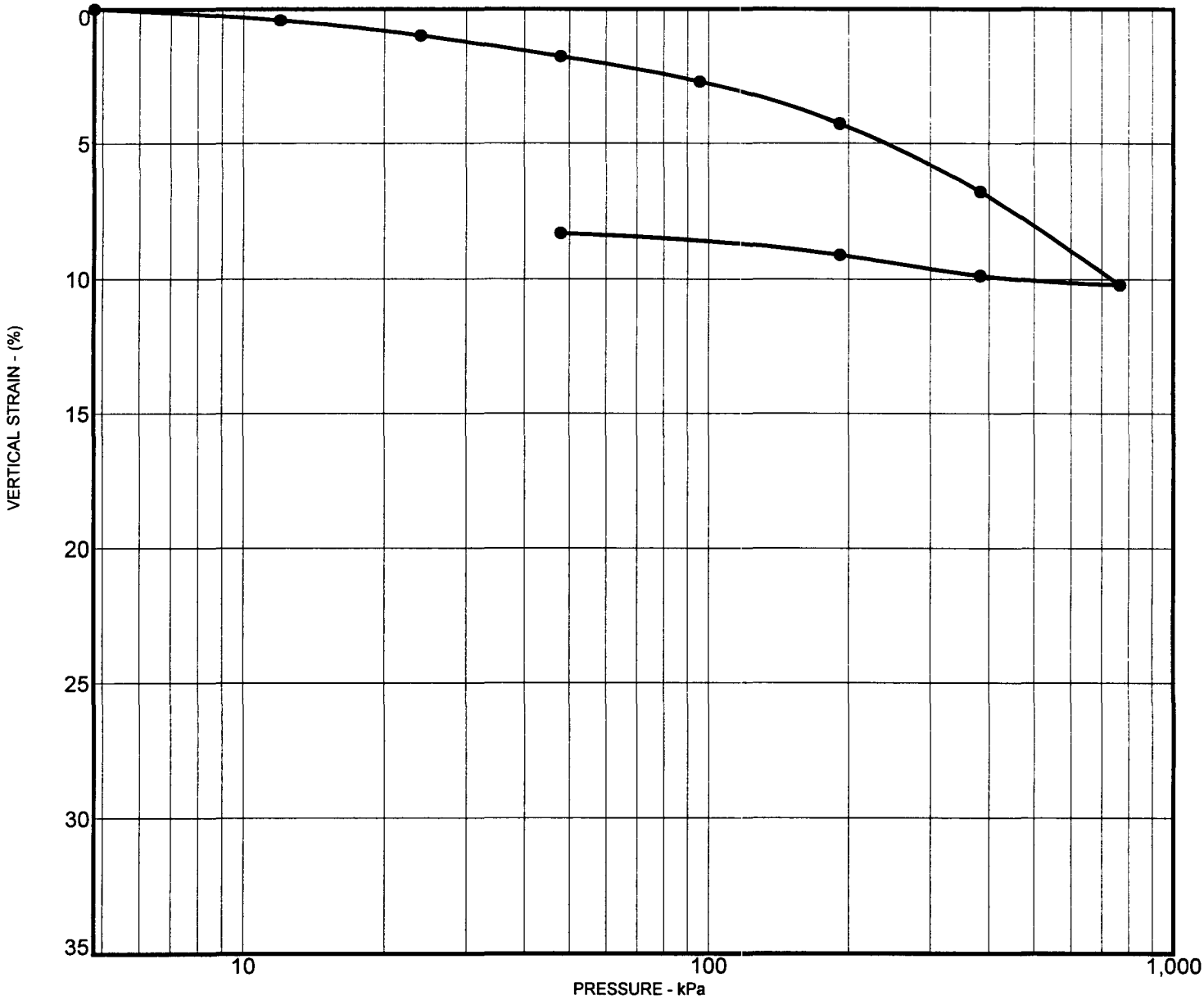
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-892

(This page left blank intentionally.)



Sample	**RB-420**
Depth	**4.57 m**
Classification	**CL**

	Initial	Final
Dry density, kN/m^3	**14.9**	**16.3**
Water content, %	**30.3**	**26.7**
Sample height, mm	**25.4**	**23.4**

KLEINFELDER

PROJECT NO. **35-8163-05**

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

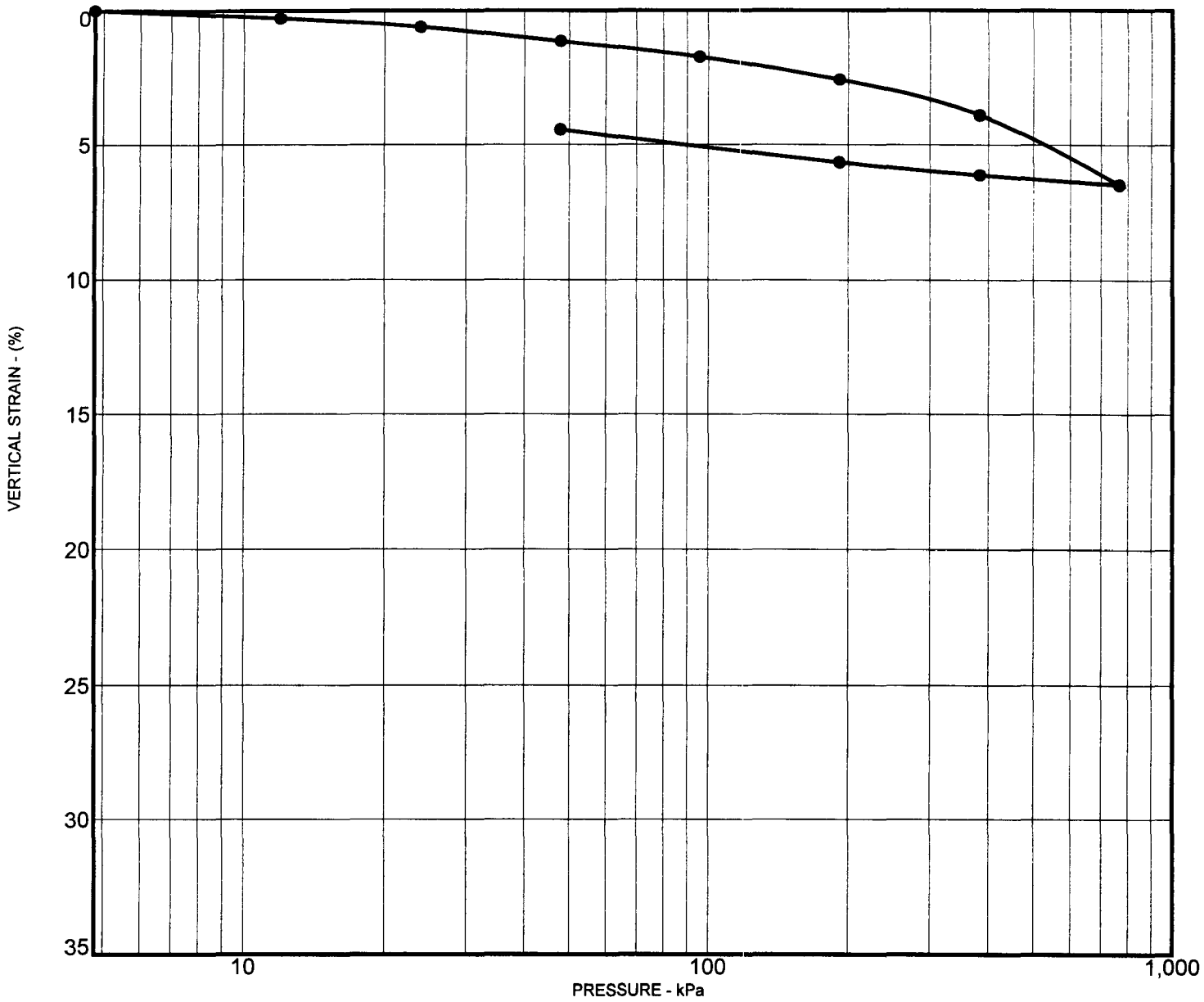
PLATE

K-894

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Sample	RB-422
Depth	6.10 m
Classification	CL

	Initial	Final
Dry density, kN/m^3	15.0	15.8
Water content, %	28.3	27.2
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

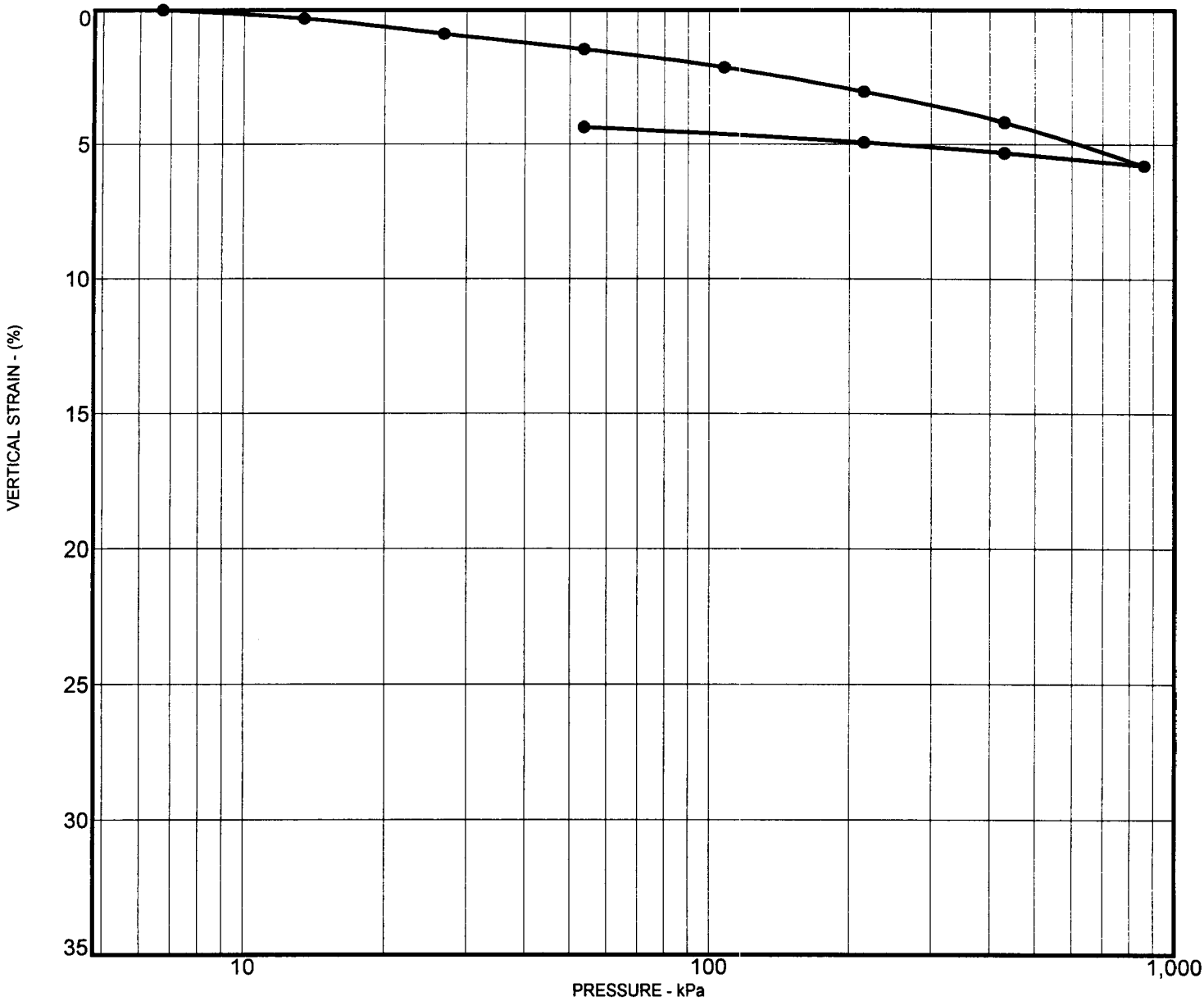
I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

PLATE

K-898

(This page left blank intentionally.)



Sample	RB-423
Depth	4.57 m
Classification	ML

	Initial	Final
Dry density, kN/m^3	14.7	15.4
Water content, %	29.2	28.1
Sample height, mm	25.4	24.4

KLEINFELDER

PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

CONSOLIDATION TEST RESULTS

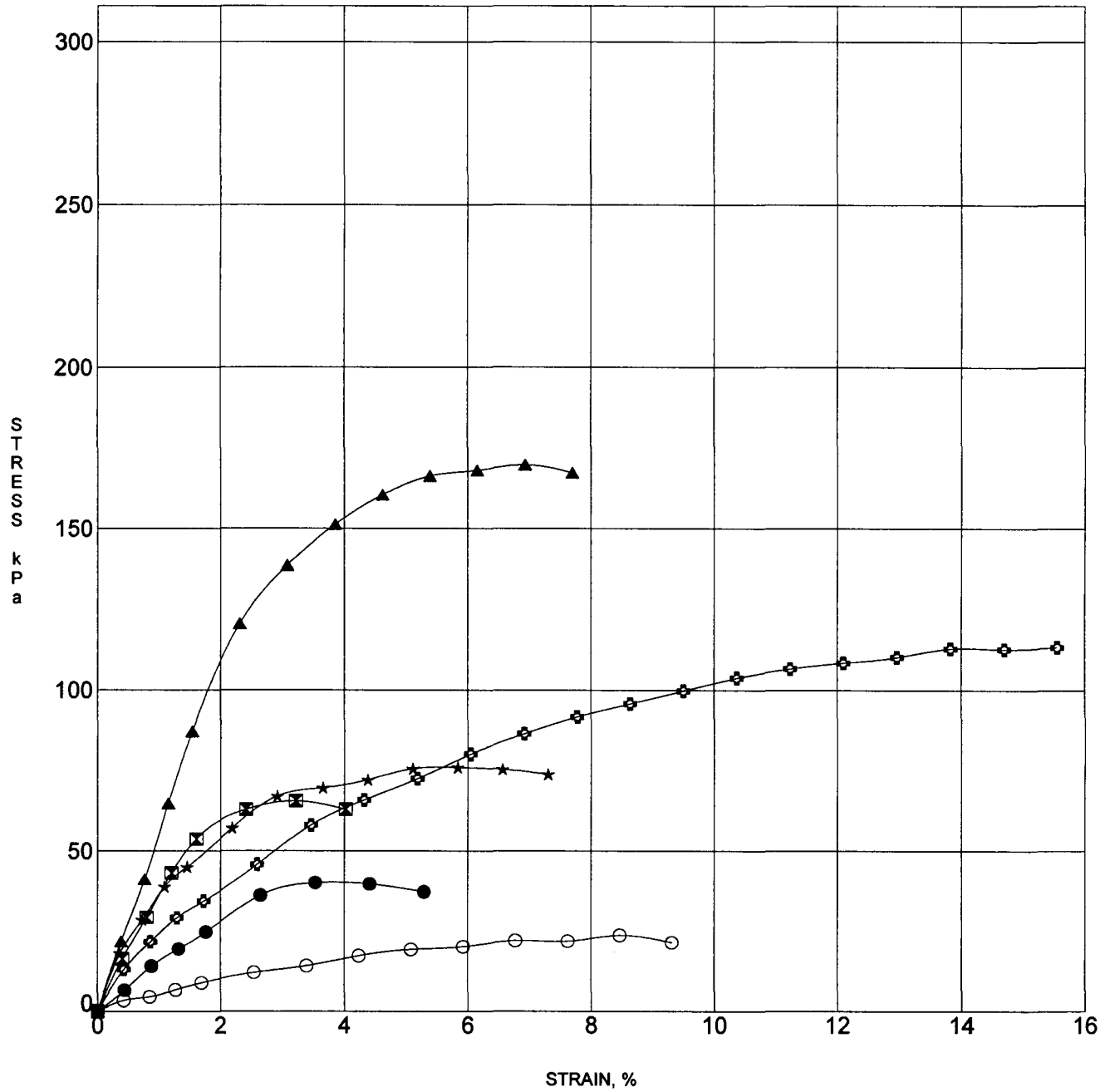
PLATE

K-900

(This page left blank intentionally.)

(This page left blank intentionally.)

(This page left blank intentionally.)



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 1-243	4.6	Elastic SILT (MH)	40	9.2	69
⊠	SB- 1-246	12.2	SILT (ML)	66	12.4	48
▲	SB- 1-246	22.9	Lean CLAY (CL)	170	14.2	34
★	SB- 2-247	13.7	Lean CLAY (CL)	76	15.9	23
○	SB- 3-248	7.6	Lean CLAY (CL)	24	11.7	49
✿	SB- 3-248	30.5	Sandy Lean CLAY (CL)	113	15.7	26

KLEINFELDER

PROJECT NO. 35-8163-05

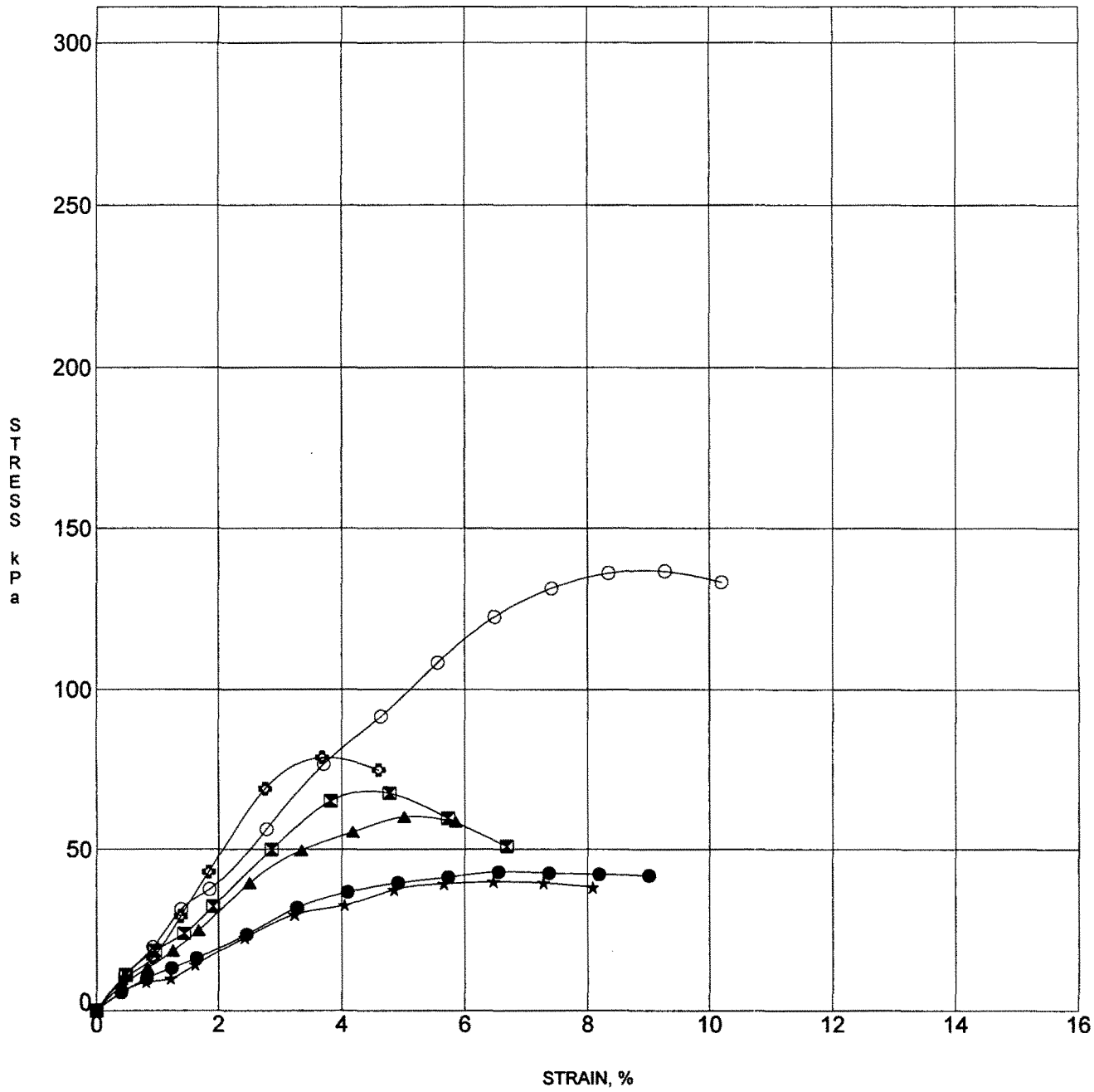
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-904



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 3-249	6.1	SILT (ML)	43	10.4	58
⊠	SB- 3-249	15.2	Lean CLAY (CL)	68	13.9	35
▲	SB- 3-250	15.2	Lean CLAY (CL)	60	13.7	33
★	SB- 4-251	3.0	Lean CLAY (CL)	40	1.5	1218
○	SB- 4-251	25.9	Lean CLAY (CL)	137	12.7	41
✿	SB- 4-251	32.0	Lean CLAY (CL)	79	15.5	26

KLEINFELDER

PROJECT NO. 35-8163-05

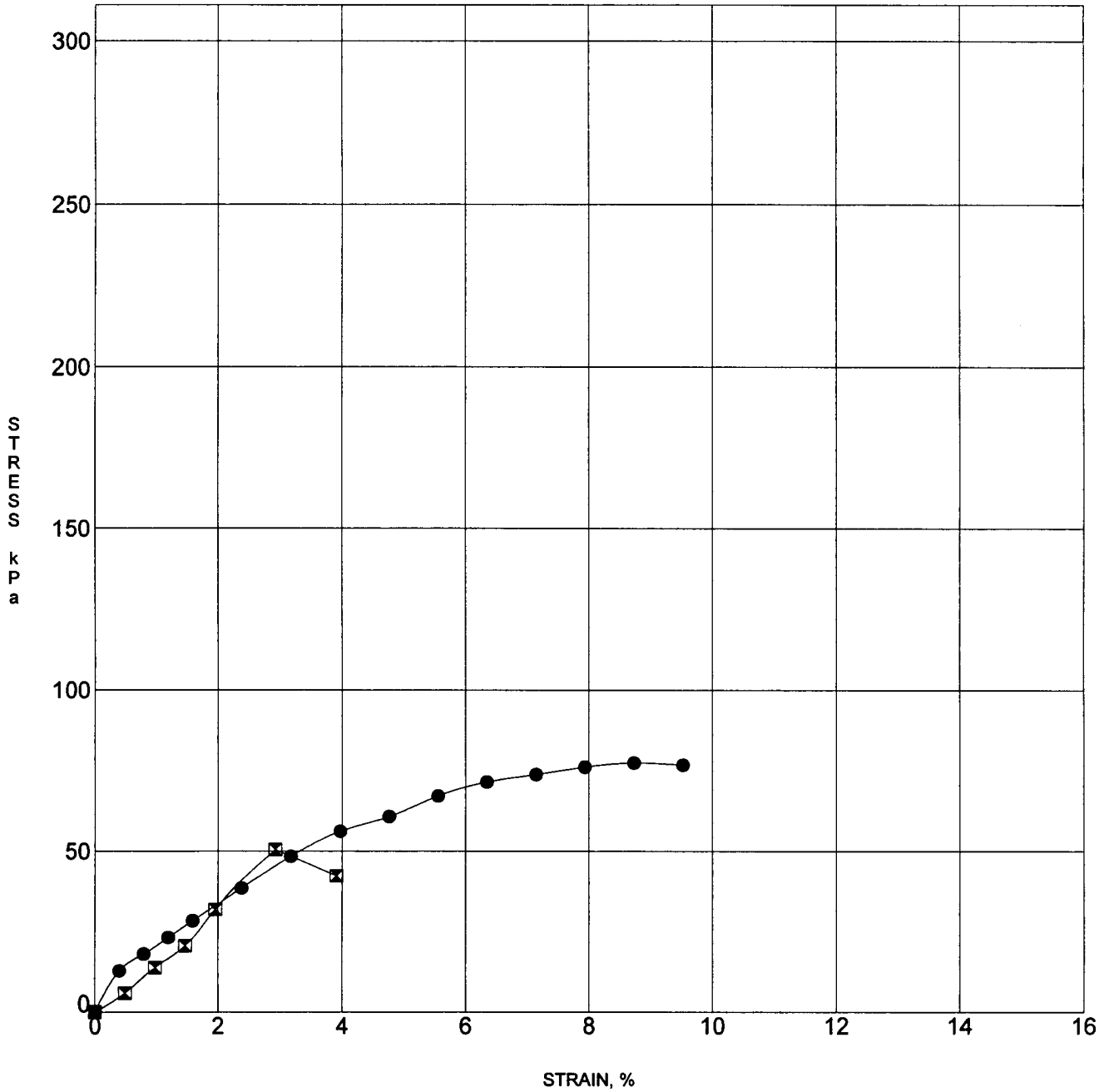
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-905



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 4-252	13.7	Lean CLAY (CL)	78	14.0	31
⊠	SB- 4-252	24.4	Sandy SILT (ML)	50	17.4	26

KLEINFELDER

PROJECT NO. 35-8163-05

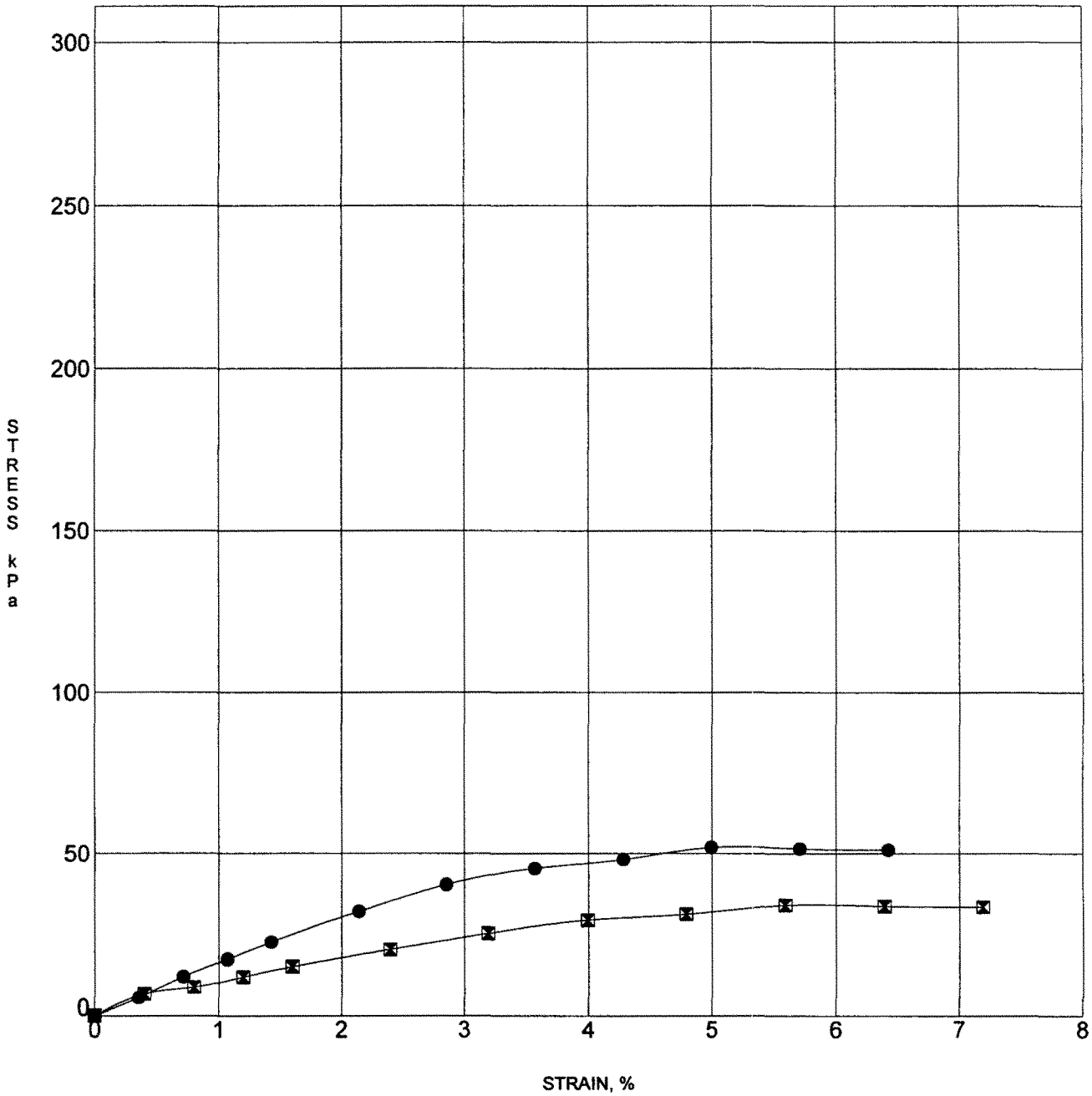
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-906



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 5-293	9.1	Lean CLAY (CL)	52	12.7	41
⊠	SB- 5-297	4.6	SILT (ML)	34	11.9	47

KLEINFELDER

PROJECT NO. 35-8163-05

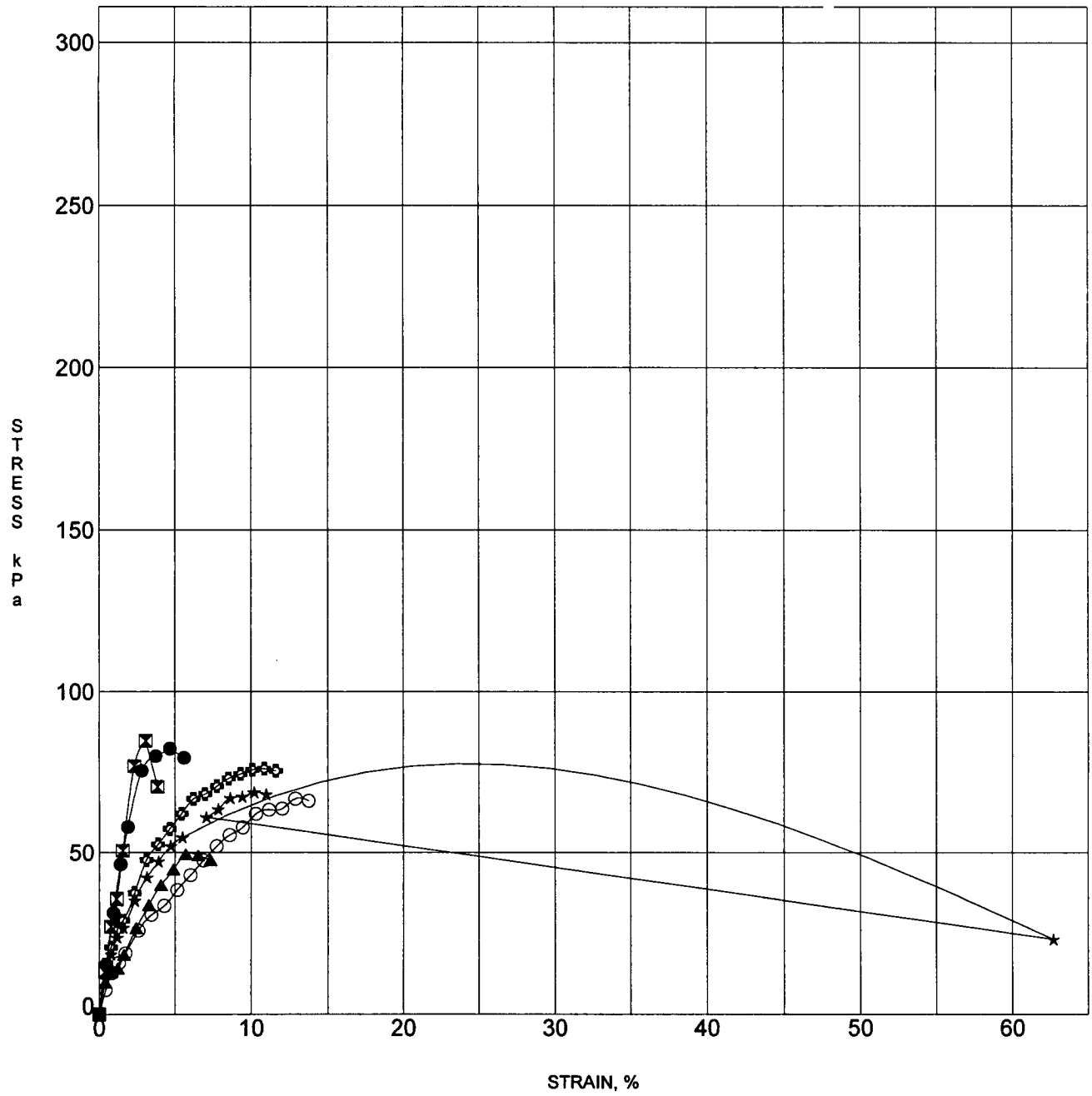
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-907



Specimen Identification			USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	SB- 6-323	10.7	Fat CLAY (CH)	82	12.1	48
⊠	SB- 6-323	32.0	SILT (ML)	85	17.3	20
▲	SB- 6-327	3.0	Lean CLAY (CL)	49	12.1	45
★	SB- 6-327	12.2	Lean CLAY (CL)	69	14.2	34
○	SB- 6-328	1.5	Lean CLAY (CL)	67	15.5	24
✿	SB- 6-328	16.8	Lean CLAY (CL)	76	13.7	31

KLEINFELDER

PROJECT NO. 35-8163-05

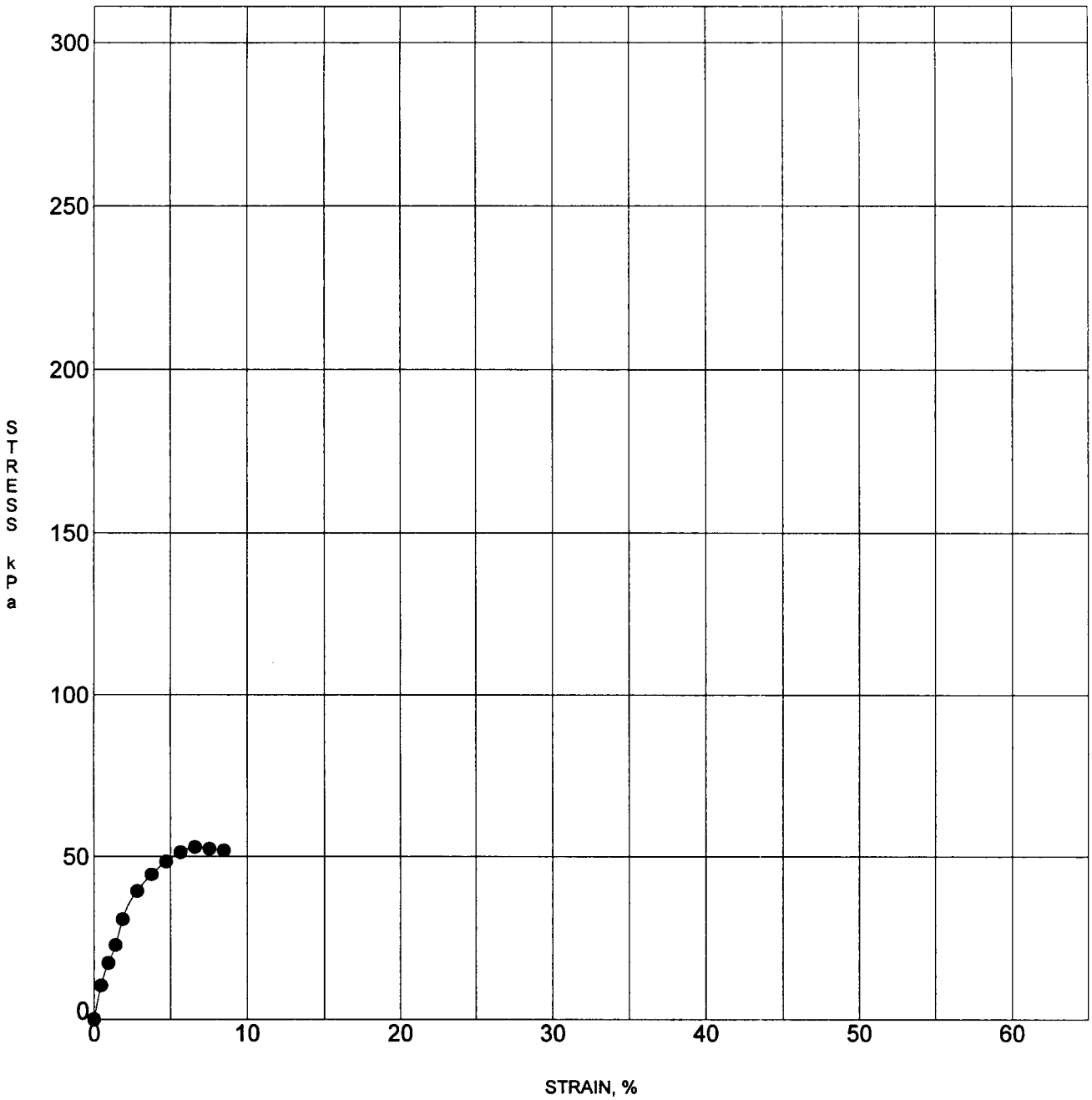
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-908



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB- 6-333	7.6	Lean CLAY (CL)	53	11.4	51

KLEINFELDER

PROJECT NO. 35-8163-05

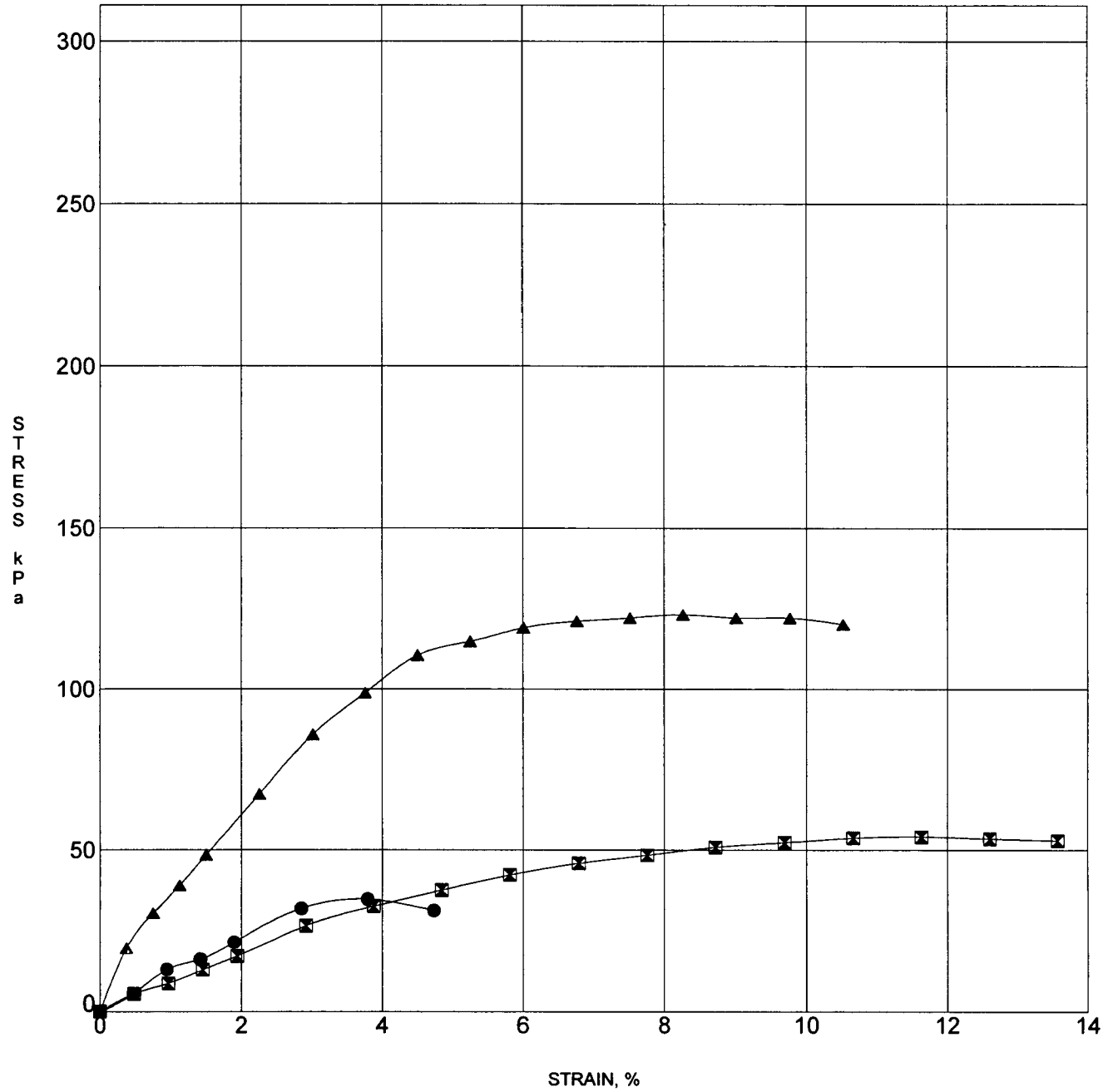
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-909



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 8-253	3.0	Lean CLAY (CL)	35	10.5	58
⊠	SB- 8-254	3.0	Fat CLAY (CH)	54	13.2	37
▲	SB- 8-254	18.3	Lean CLAY (CL)	123	12.5	41

KLEINFELDER

PROJECT NO. 35-8163-05

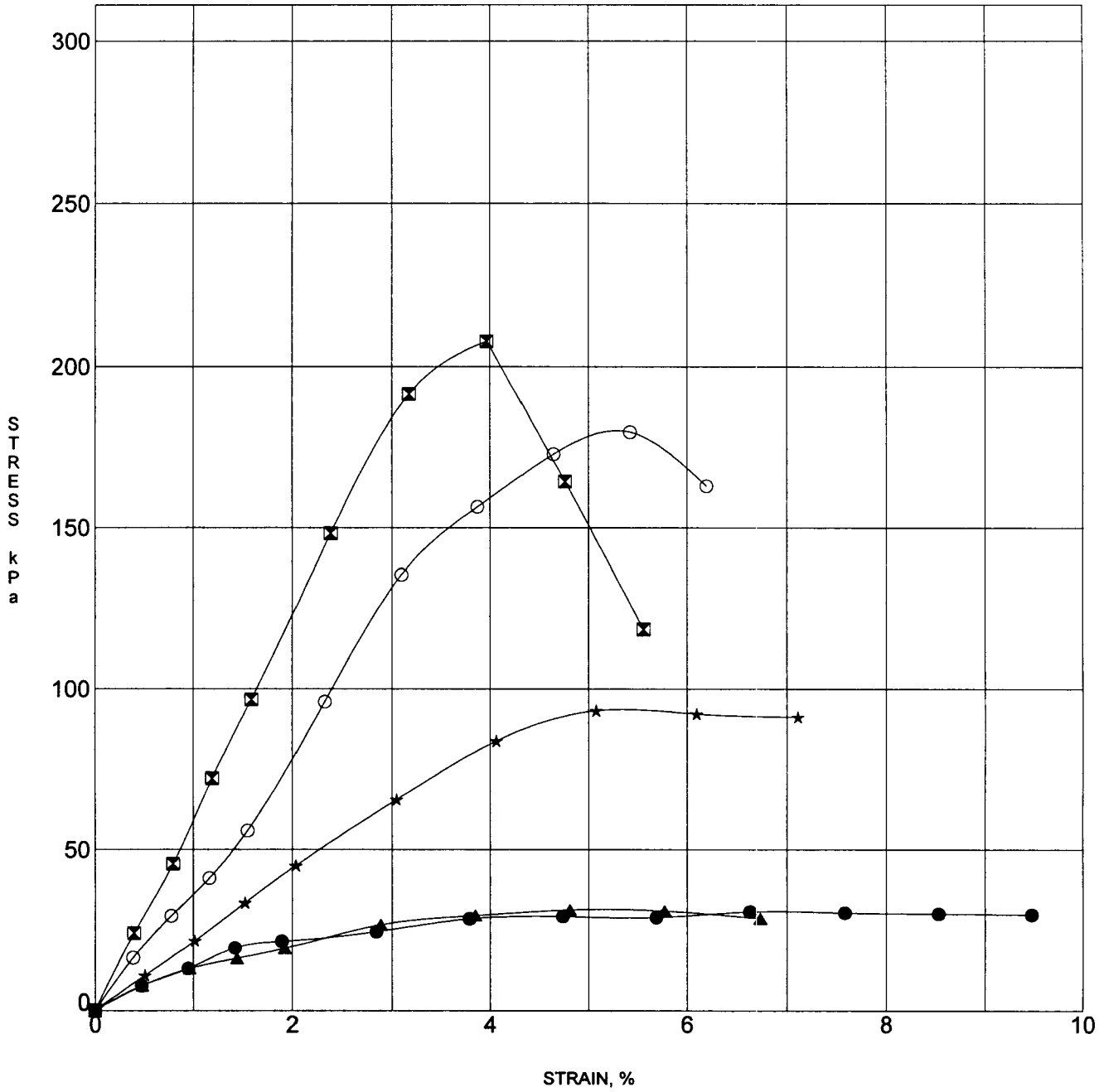
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-910



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB- 9-298	1.5	Lean CLAY (CL)	31	11.8	49
⊠	SB- 9-298	21.3	Sandy Lean CLAY (CL)	208	10.0	34
▲	SB- 9-299	7.6	Lean CLAY (CL)	31	13.3	39
★	SB- 9-299	18.3	Lean CLAY (CL)	93	14.8	29
○	SB- 9-299	35.1	Silty CLAY (CL-ML)	180	16.2	23

KLEINFELDER

PROJECT NO. 35-8163-05

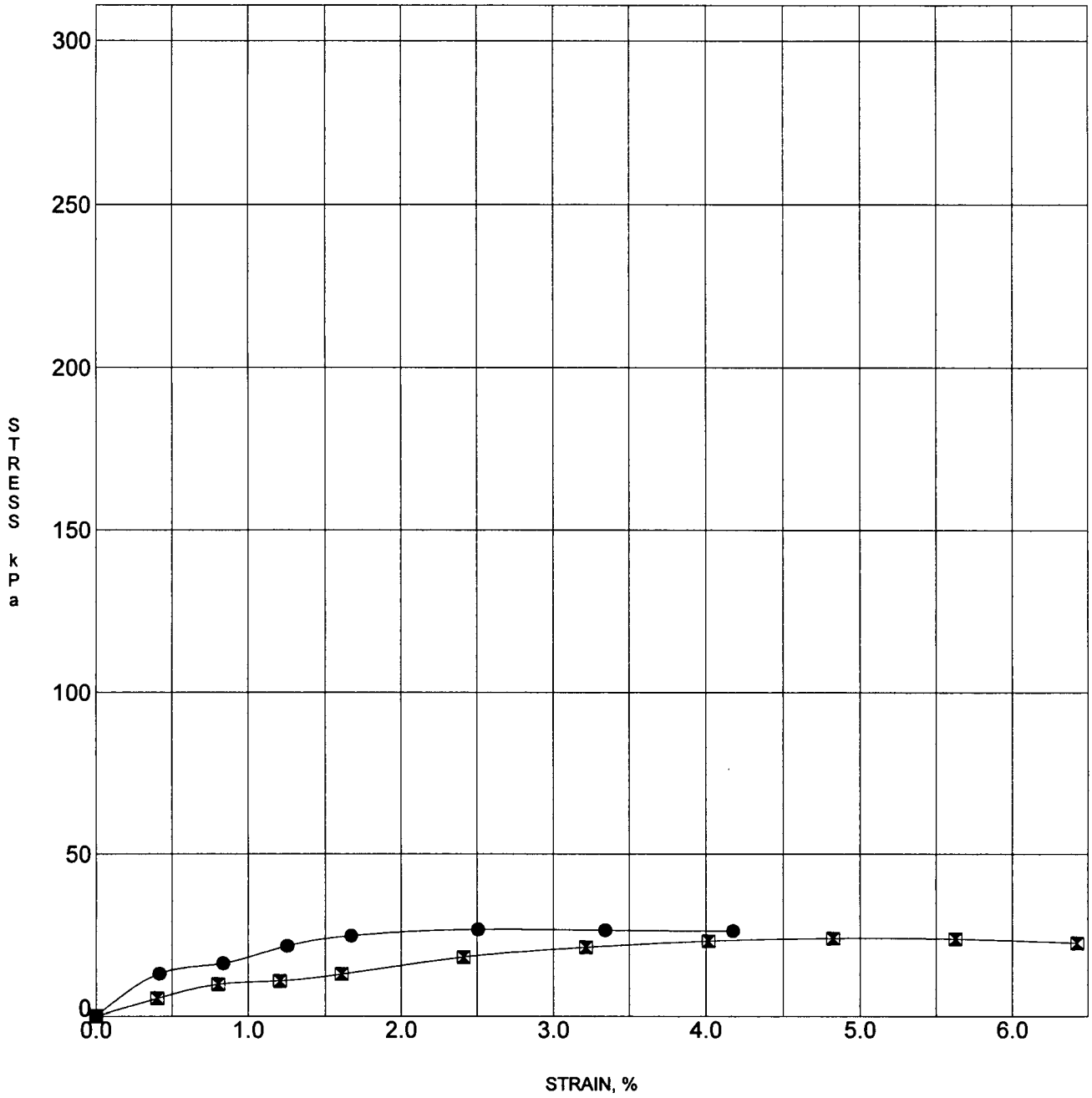
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-911



Specimen Identification			USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	SB-10-300	3.0	Lean CLAY (CL)	27	9.7	66
⊠	SB-10-303	3.0	Lean CLAY (CL)	24	9.9	58

KLEINFELDER

PROJECT NO. 35-8163-05

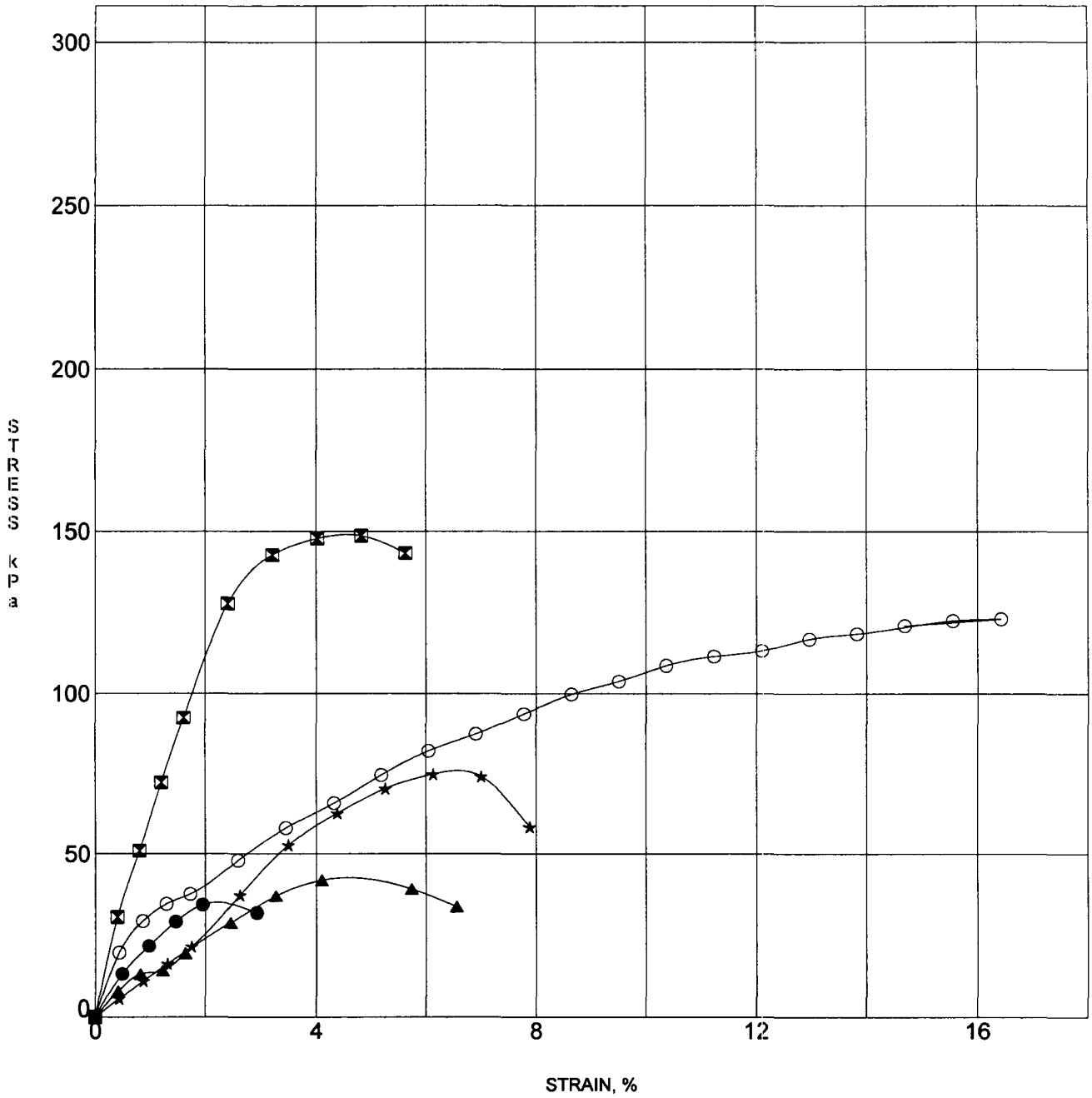
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-912



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-11-259	8.8	Sandy SILT (ML)	34	15.3	27
⊠	SB-11-259	27.1	Clayey SAND (SC)	149	16.8	23
▲	SB-11-262	7.6	Sandy Lean CLAY (CL)	42	17.3	10
★	SB-11-262	10.7	Lean CLAY (CL)	75	15.0	29
○	SB-11-262	16.8	Fat CLAY (CH)	123	13.6	33

KLEINFELDER

PROJECT NO. 35-8163-05

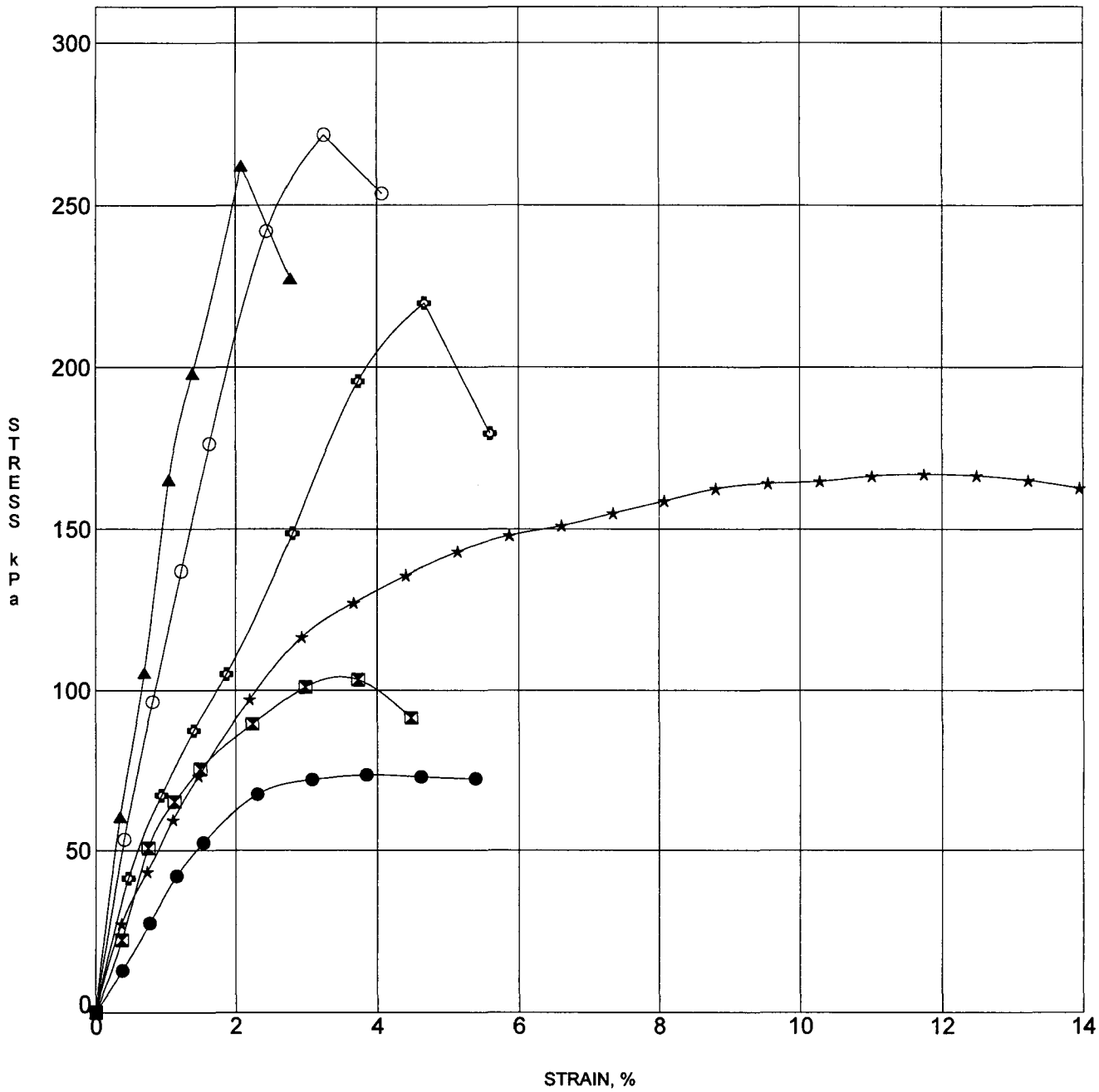
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-913



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-12-263	5.2	Lean CLAY (CL)	74		
⊠	SB-12-263	18.3	Lean CLAY (CL)	103		
▲	SB-12-263	41.1	SILT (ML)	262		
★	SB-12-265	4.6	Lean CLAY (CL)	167	15.7	27
○	SB-12-265	30.5	Lean CLAY (CL)	272	16.1	26
✿	SB-12-265	48.8	SILT (ML)	220	15.1	27

KLEINFELDER

PROJECT NO. 35-8163-05

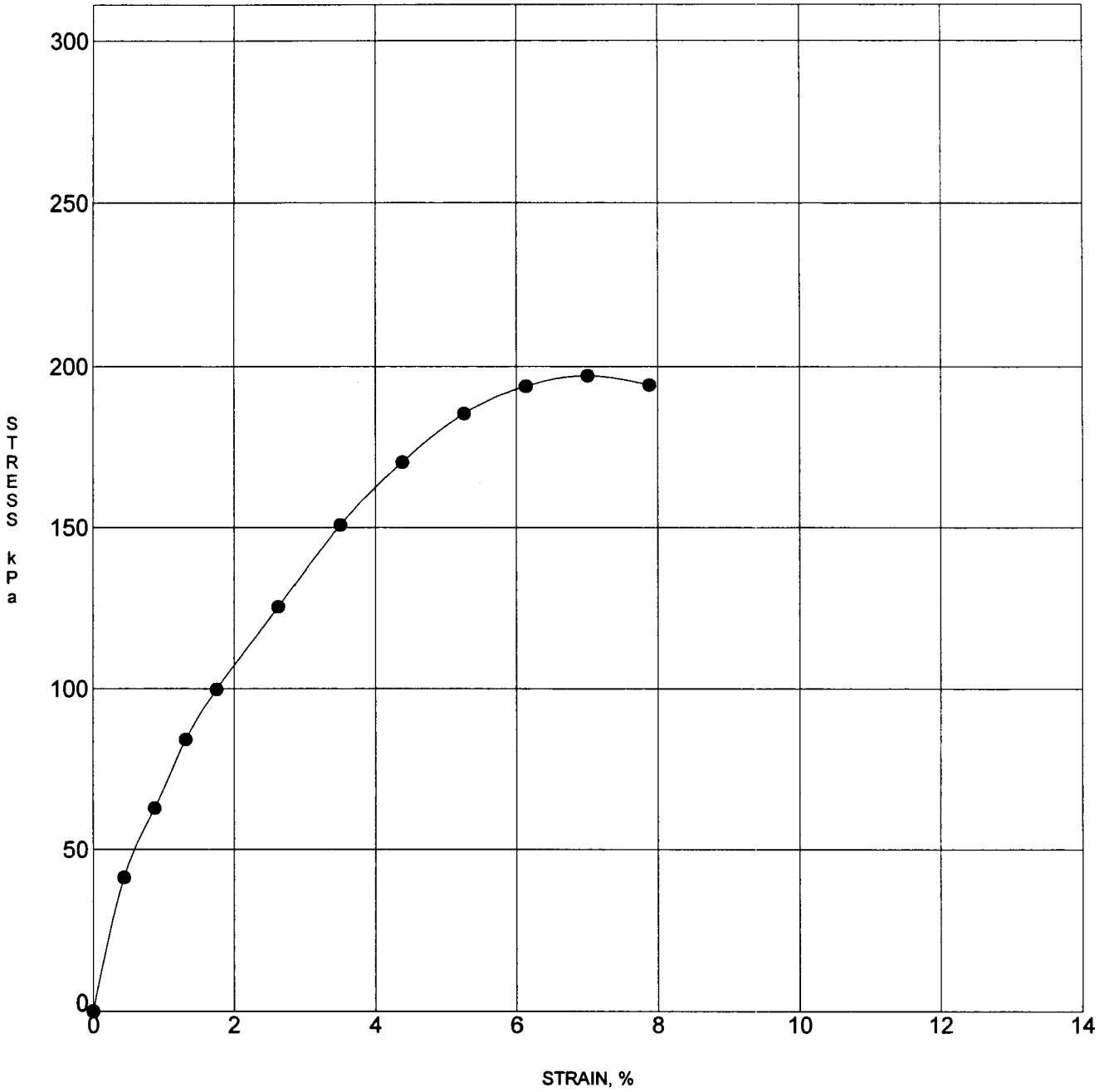
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-914



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-12-265	73.2	Lean CLAY (CL)	197	16.4	26

KLEINFELDER

PROJECT NO. 35-8163-05

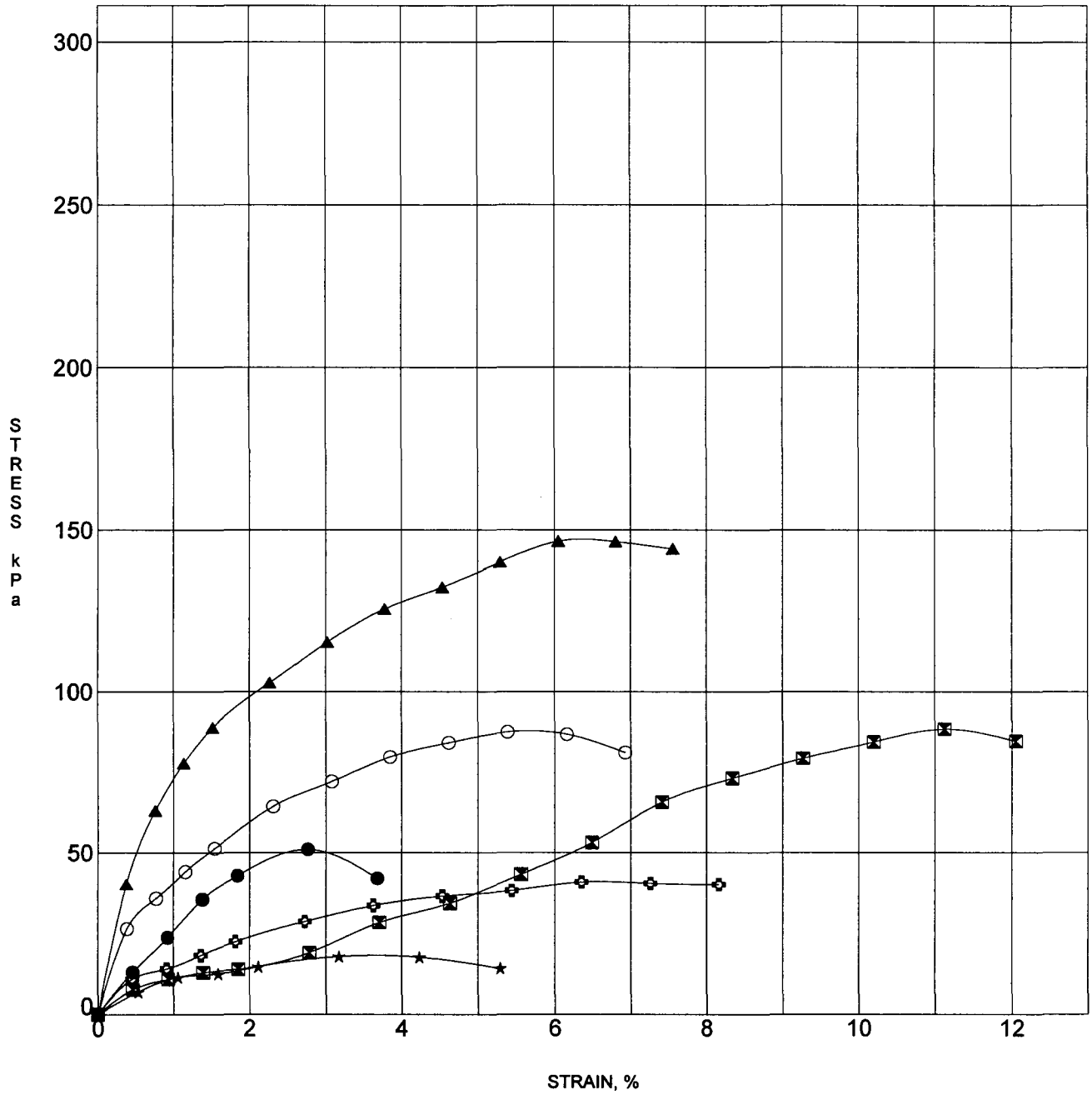
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-915



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-13-304	4.6	Lean CLAY (CL)	51	14.4	33
⊠	SB-13-304	27.4	Sandy Lean CLAY (CL)	88	16.0	28
▲	SB-13-304	51.8	Lean CLAY (CL)	147	14.1	33
★	SB-13-308	8.2	Elastic SILT (MH)	18	12.0	47
○	SB-13-308	50.3	Lean CLAY (CL)	87	13.3	46
✿	SB-14-309	10.4	Lean CLAY (CL)	41	10.7	56

KLEINFELDER

PROJECT NO. 35-8163-05

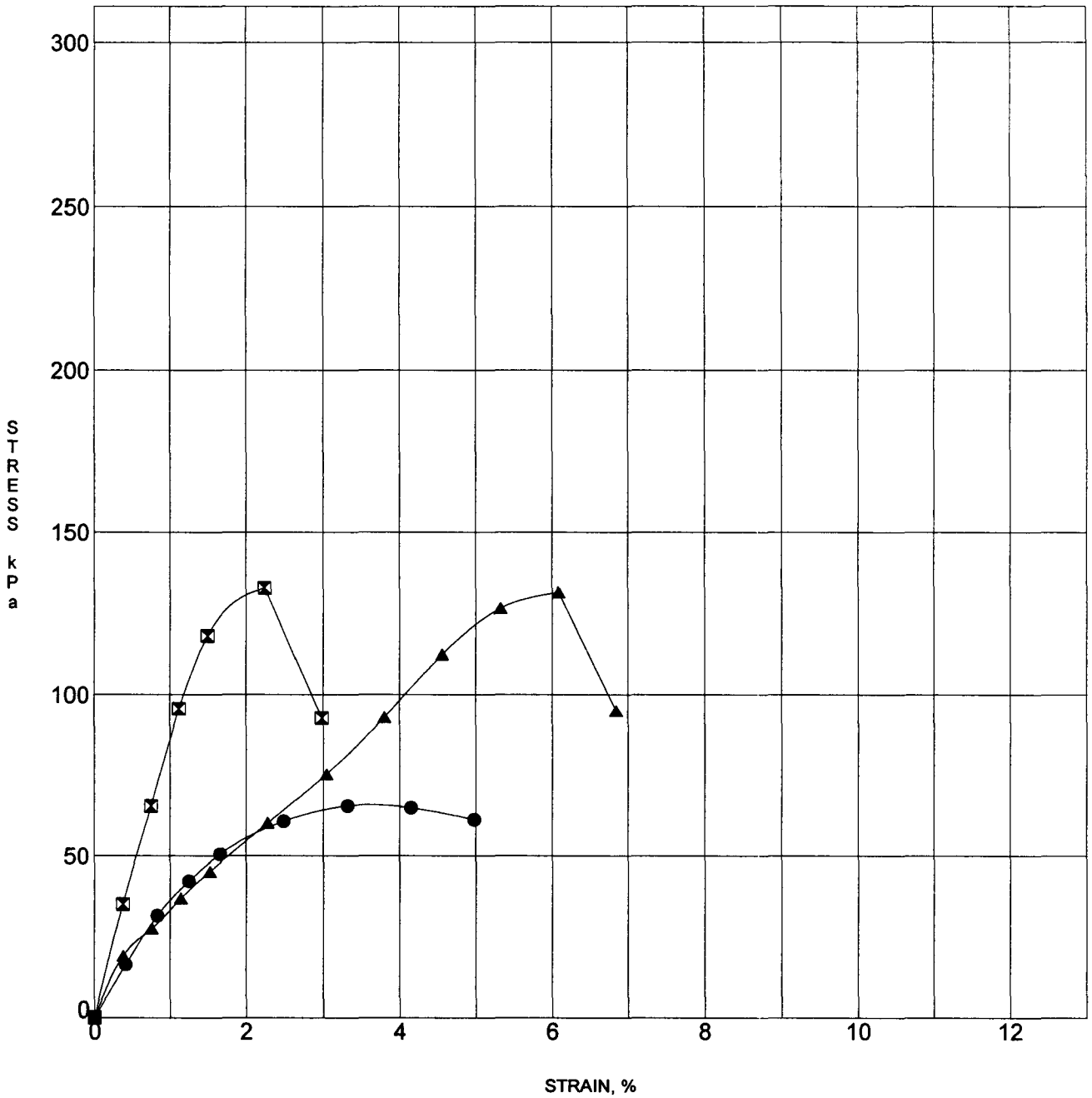
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-916



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-14-313	7.6	Elastic SILT (MH)	65	10.4	61
⊠	SB-14-313	21.3	SILT (ML)	133	14.9	31
▲	SB-14-313	42.7	SILT with sand (ML)	132	17.3	20

KLEINFELDER

PROJECT NO. 35-8163-05

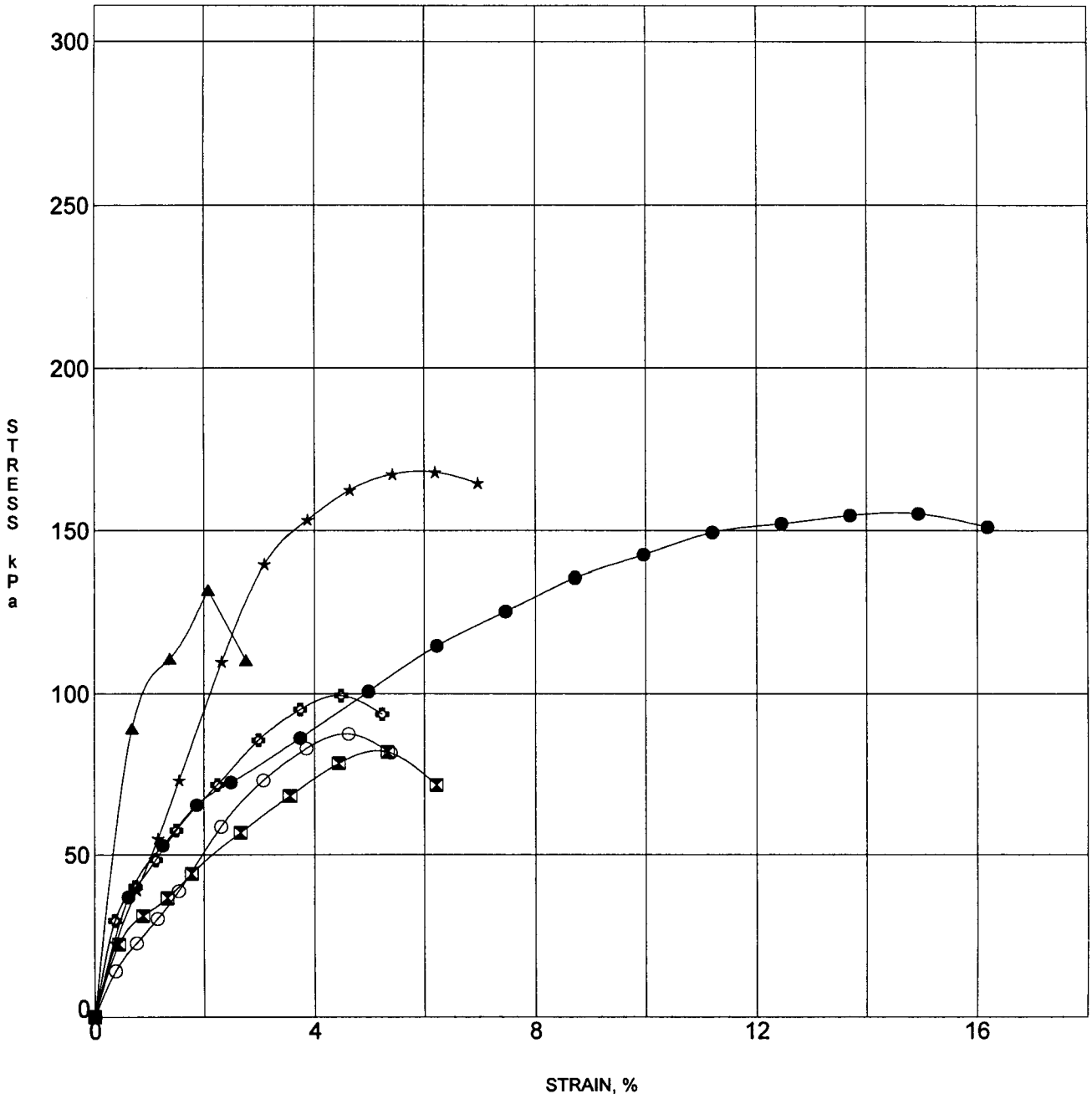
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-917



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-15-266	3.0	Lean CLAY (CL)	155	16.2	26
⊠	SB-15-266	24.4	Elastic SILT (MH)	82	13.3	35
▲	SB-15-266	48.8	Fat CLAY (CH)	132	15.6	31
★	SB-15-267	5.5	Lean CLAY (CL)	168	15.0	30
○	SB-15-267	27.4	SILT (ML)	88	15.6	28
✿	SB-15-267	48.2	()	99	14.1	35

KLEINFELDER

PROJECT NO. 35-8163-05

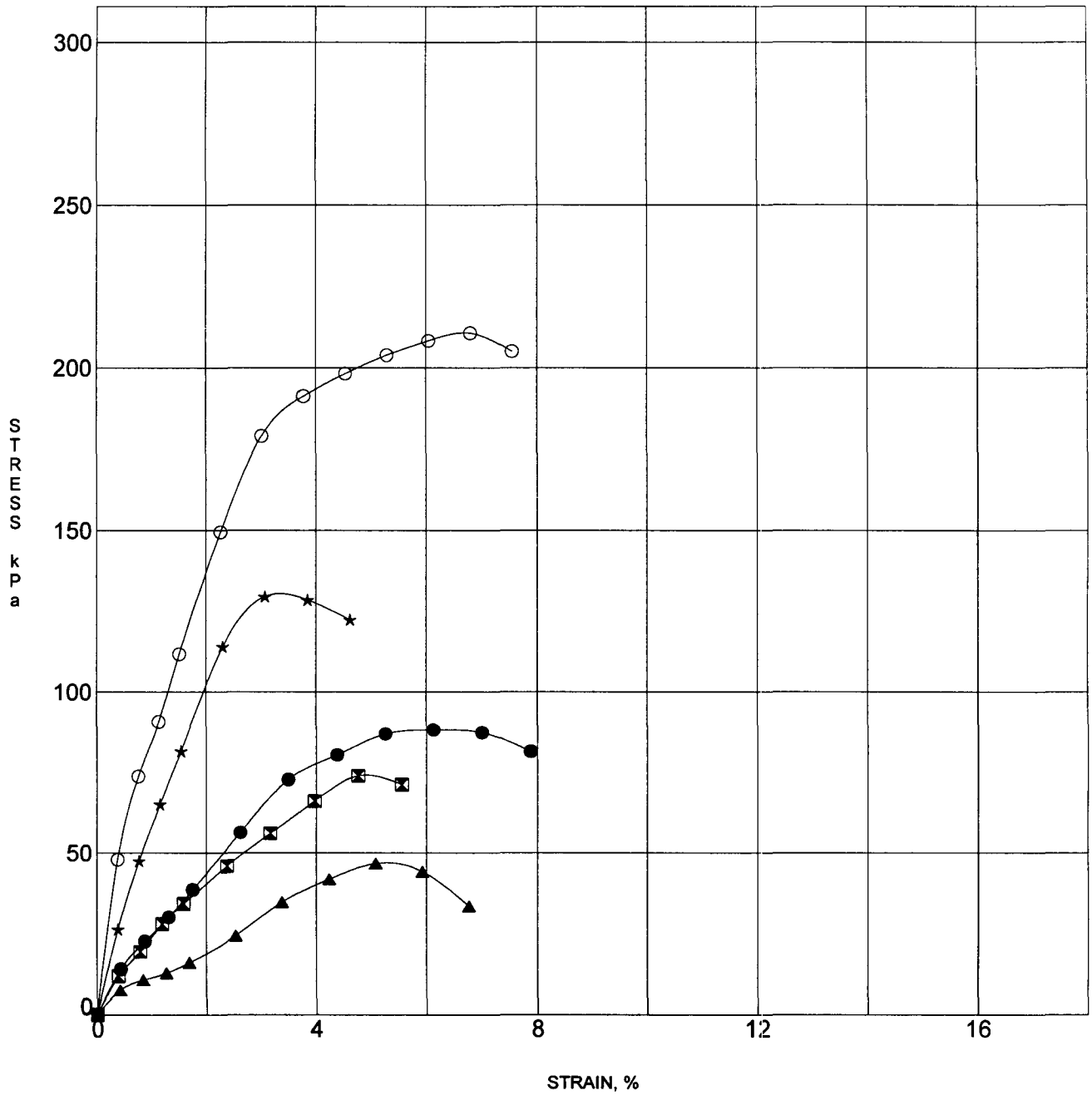
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-918



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-1504-359	1.5	Lean CLAY (CL)	88	15.9	28
⊠	SB-1504-359	24.1	Lean CLAY (CL)	74	14.8	30
▲	SB-16-268	13.7	Lean CLAY (CL)	47		
★	SB-16-362	7.5	Lean CLAY (CL)	130	11.2	52
○	SB-16-362	30.3	Lean CLAY (CL)	211	15.3	30

KLEINFELDER

PROJECT NO. 35-8163-05

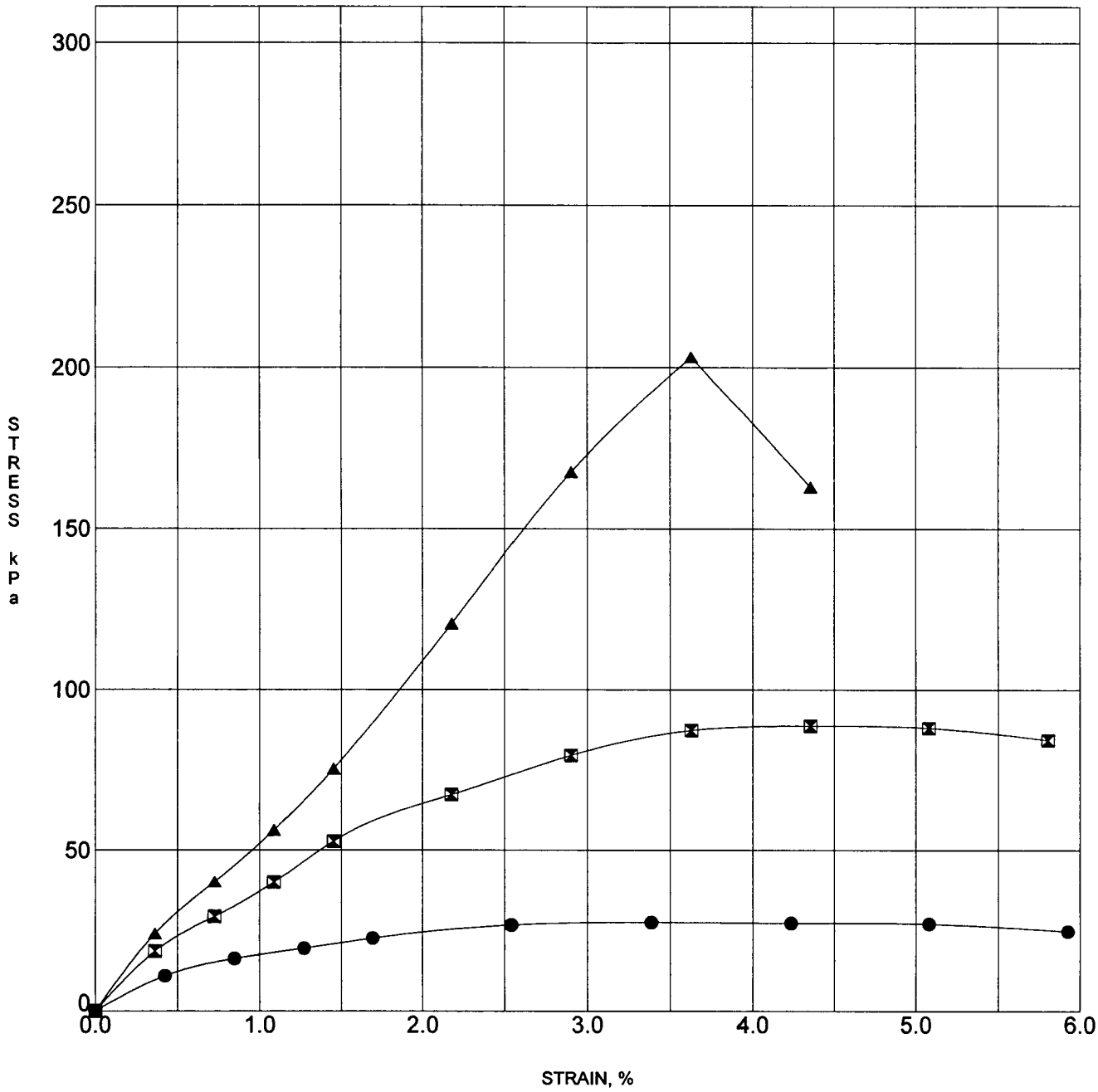
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-919



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-17-271	5.8	Silty Clayey SAND (SC-SM)	27	12.5	44
⊠	SB-17-271	21.0	Lean CLAY (CL)	89	12.5	42
▲	SB-17-271	50.0	Sandy Lean CLAY (CL)	203	8.5	76

KLEINFELDER

PROJECT NO. 35-8163-05

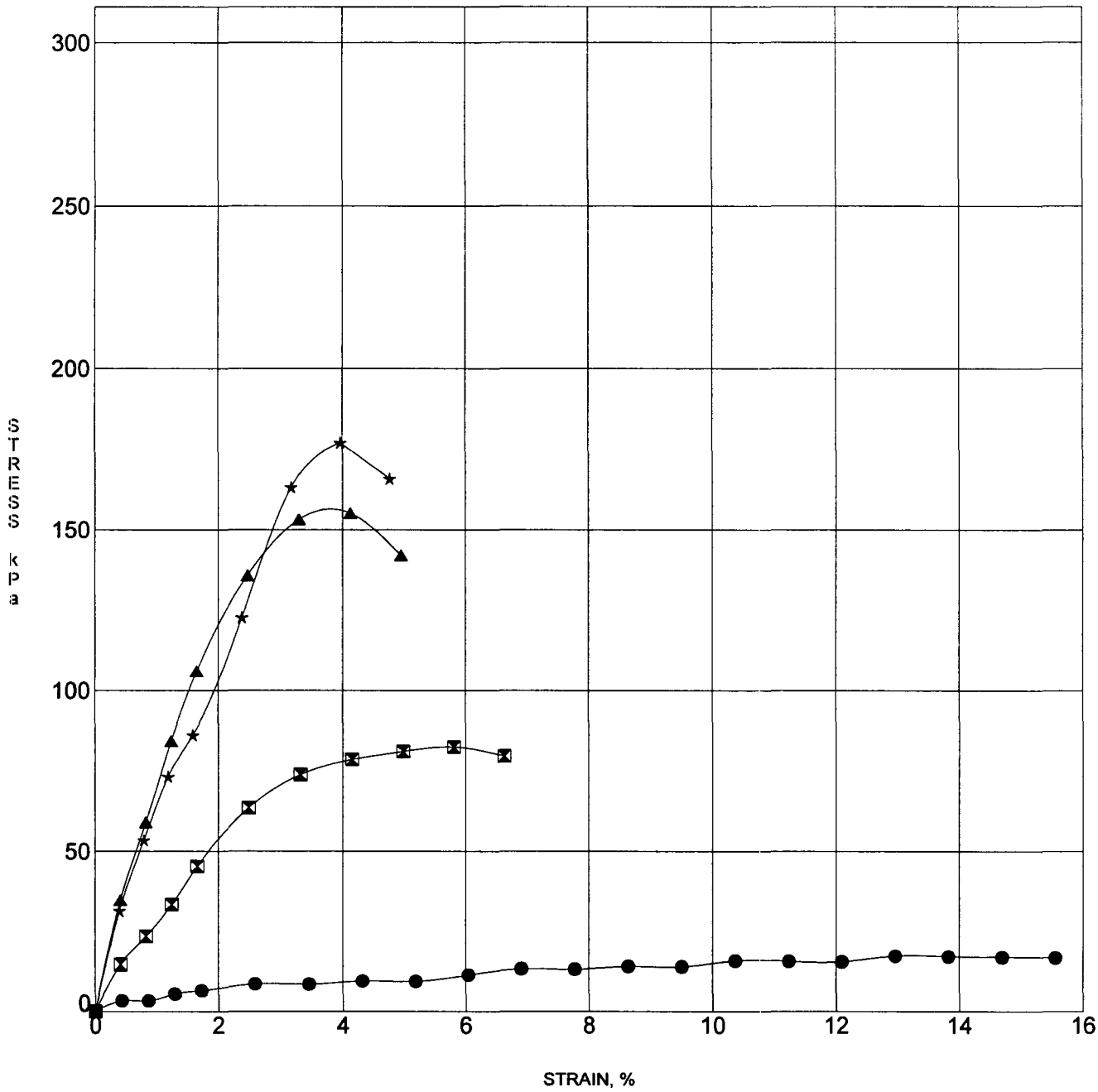
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-920



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-18-272	7.6	Lean CLAY with sand (CL)	17	11.0	57
⊠	SB-18-272	18.3	Lean CLAY (CL)	83	14.3	33
▲	SB-18-272	30.5	Lean CLAY with sand (CL)	155	11.8	46
★	SB-18-272	42.7	Lean CLAY (CL)	177	16.0	26

KLEINFELDER

PROJECT NO. 35-8163-05

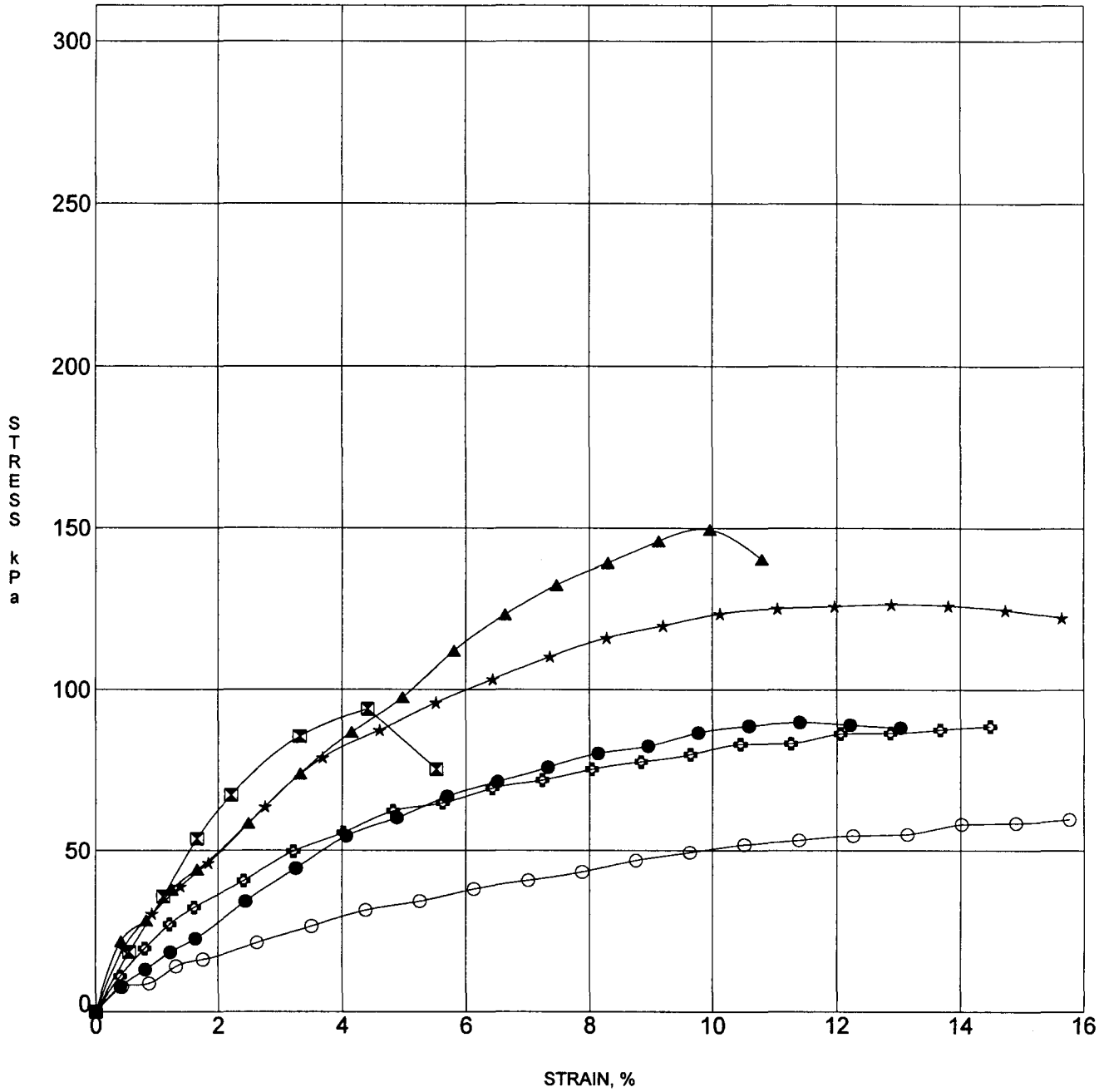
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-921



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-19-274	15.2	Lean CLAY (CL)	90	14.9	29
⊠	SB-19-274	25.9	Clayey SAND (SC)	94	17.1	19
▲	SB-19-276	18.3	Lean CLAY (CL)	150	17.1	25
★	SB-19-276	24.4	Lean CLAY (CL)	127	14.6	30
○	SB-19-279	6.7	SILT (ML)	60	14.4	34

KLEINFELDER

PROJECT NO. 35-8163-05

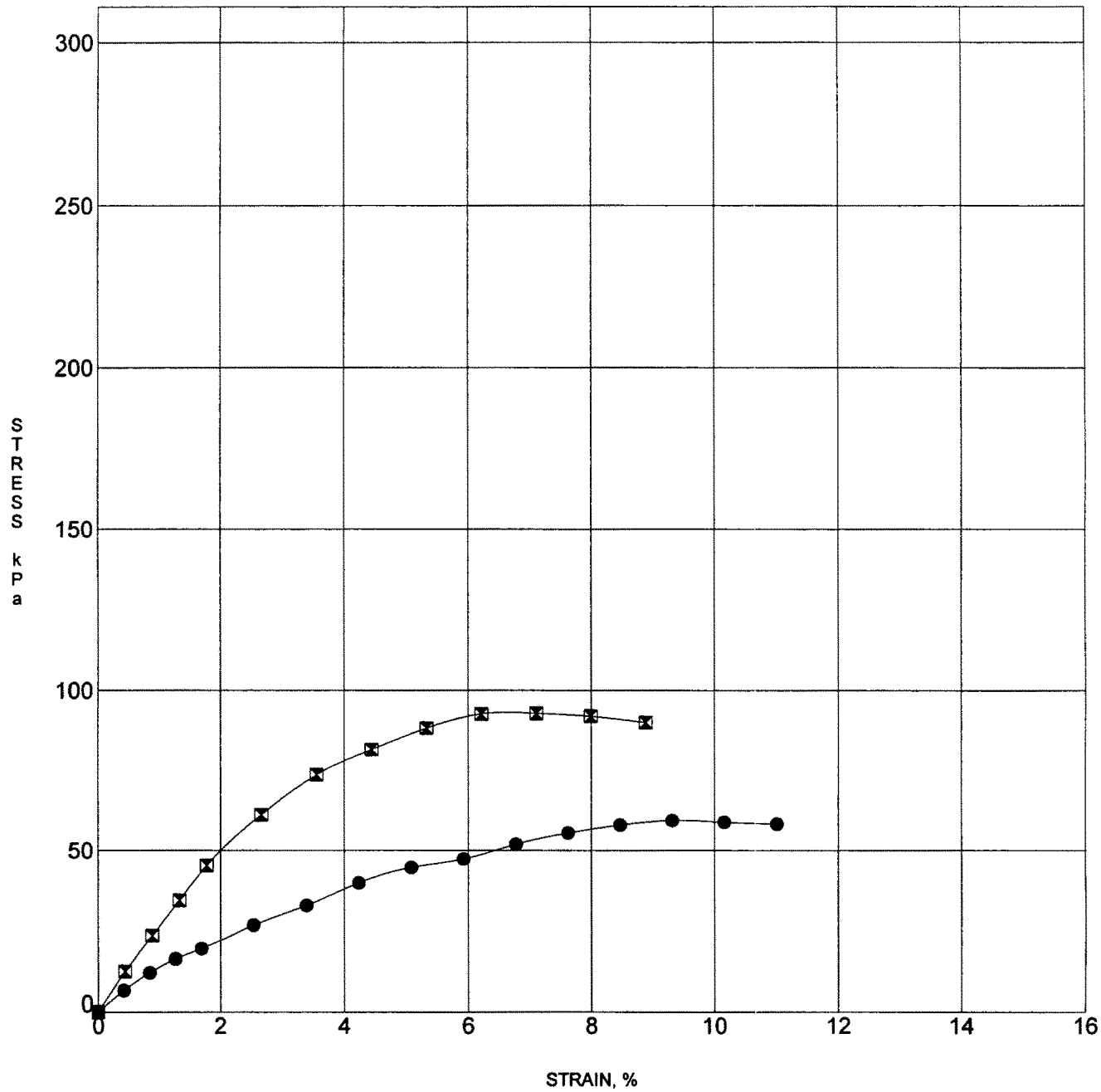
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-922



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-19-281	9.1	Lean CLAY (CL)	59	15.4	31
⊠ SB-19-281	15.8	Elastic SILT (MH)	93	11.8	50

KLEINFELDER

PROJECT NO. 35-8163-05

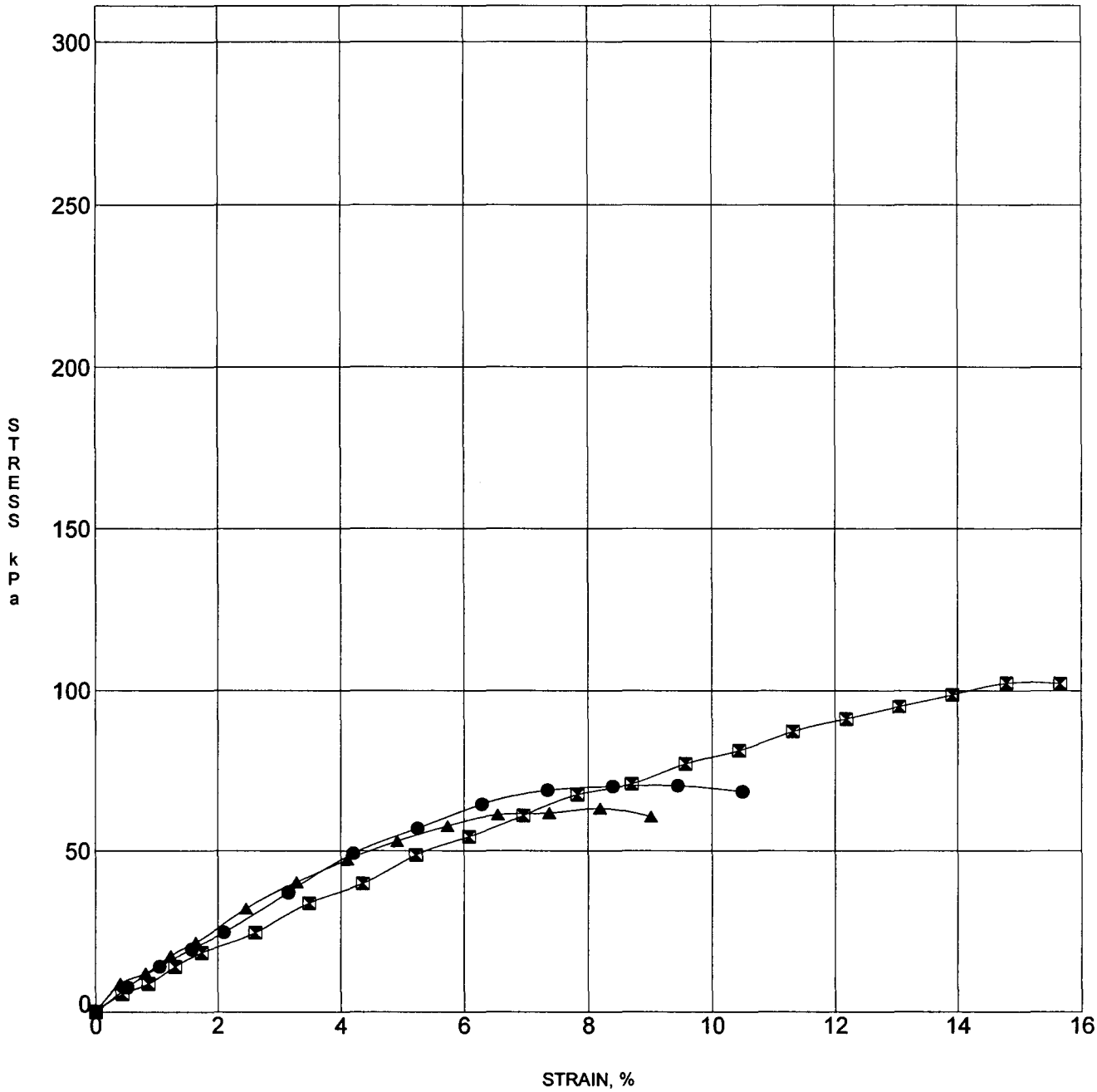
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-923



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-21-282	7.6	Fat CLAY (CH)	70	13.6	38
⊠	SB-21-282	16.8	Lean CLAY (CL)	102	15.7	27
▲	SB-21-284	21.3	Lean CLAY (CL)	63	16.9	22

KLEINFELDER

PROJECT NO. 35-8163-05

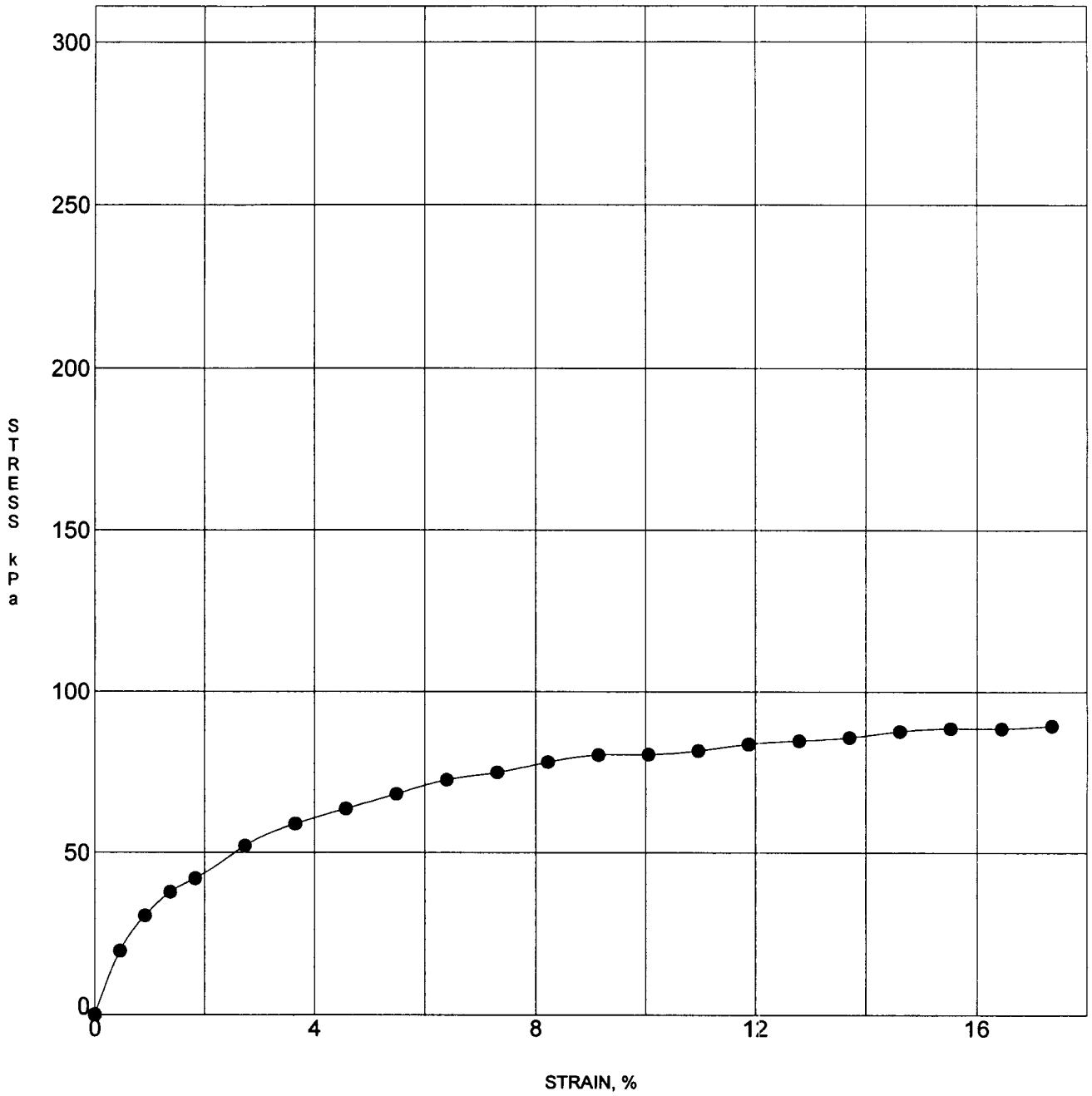
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-924



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-22-285	13.7	Sandy Lean CLAY (CL)	89	15.5	28

KLEINFELDER

PROJECT NO. 35-8163-05

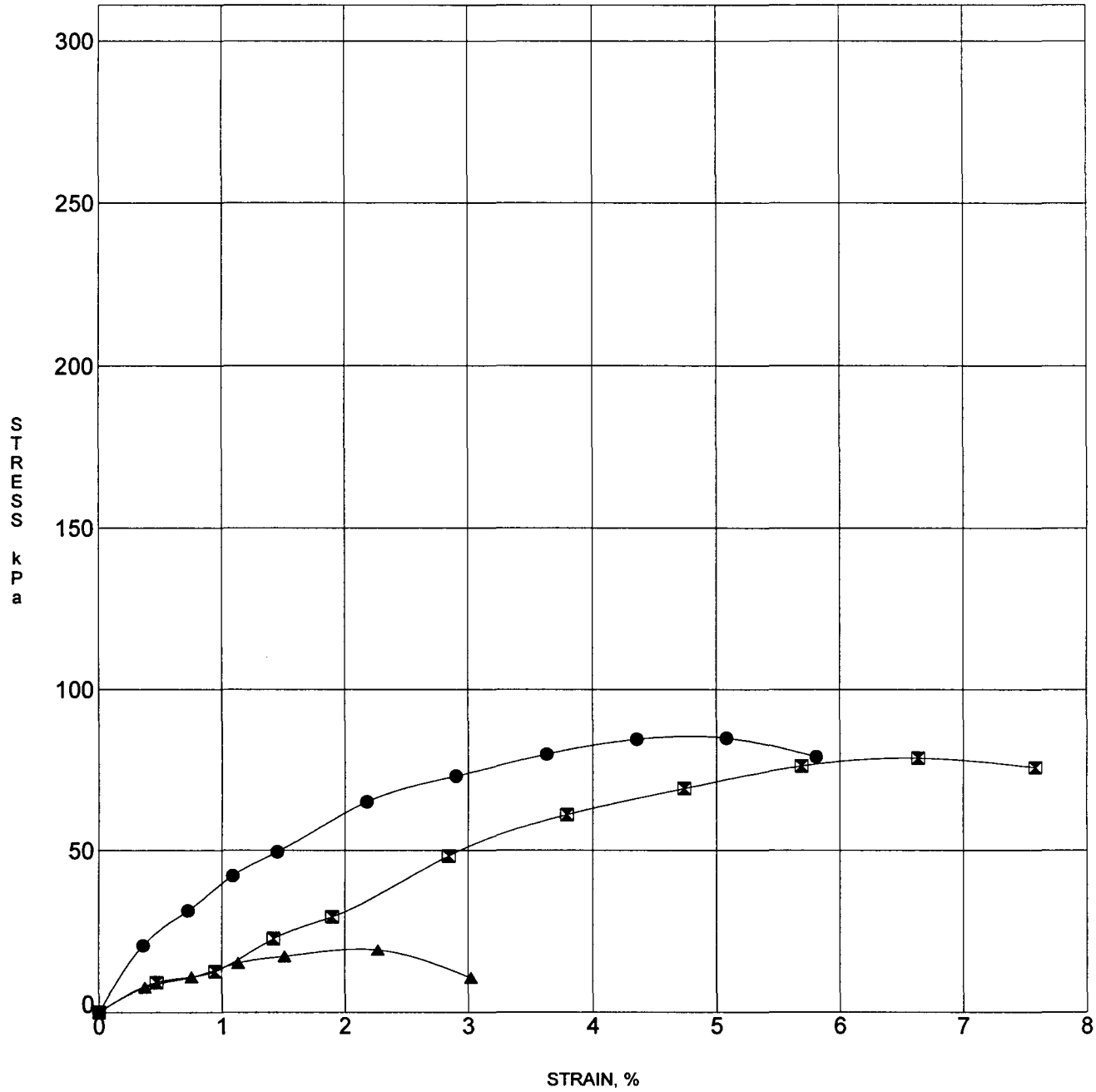
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-925



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-24-255	1.5	SILT (ML)	85	14.7	32
⊠ SB-24-258	3.0	SILT with sand (ML)	79	15.7	30
▲ SB-24-258	10.7	SILT (ML)	19	15.8	27

KLEINFELDER

PROJECT NO. 35-8163-05

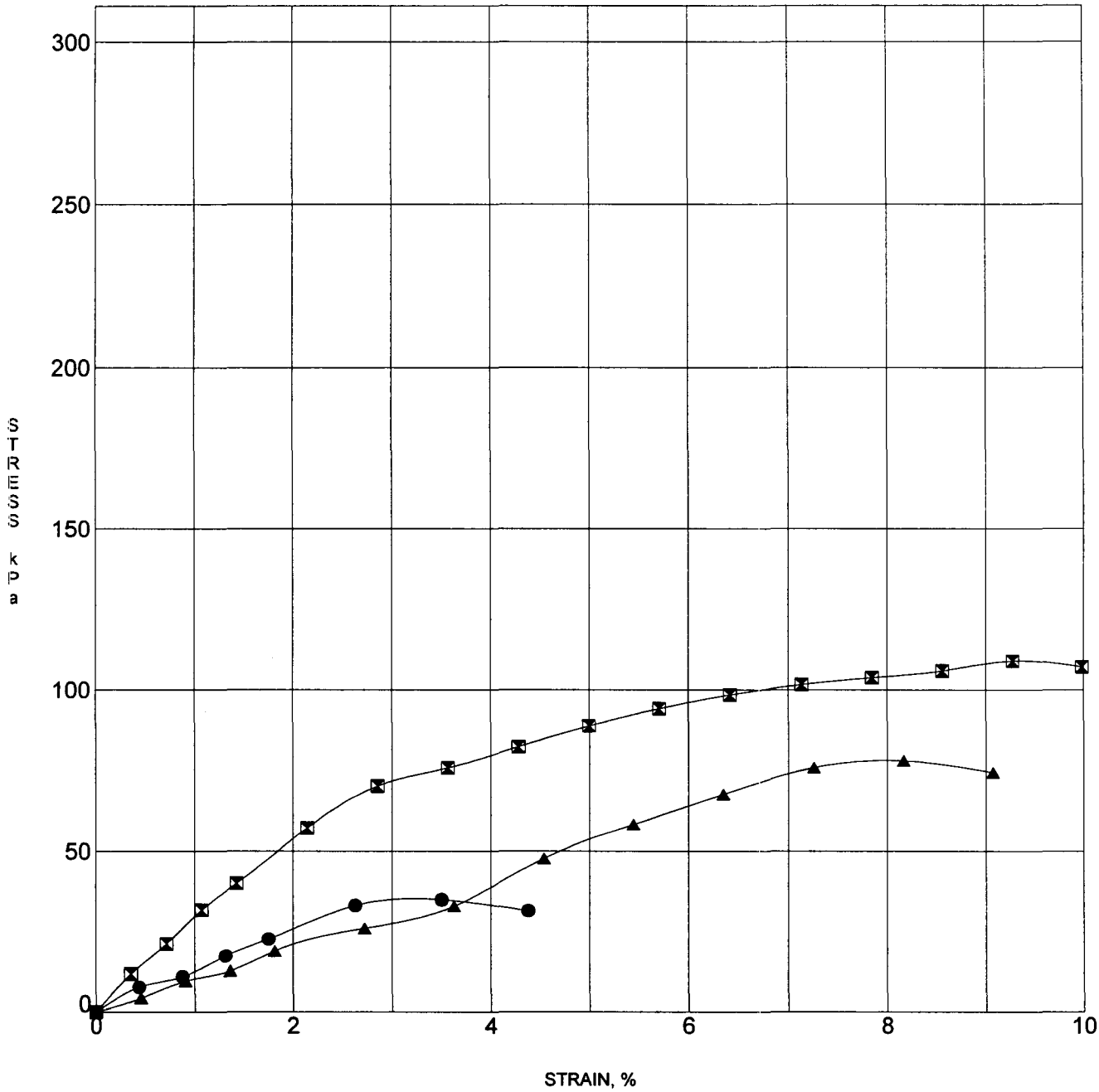
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-926



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-25-334	3.0	Lean CLAY (CL)	35	12.8	41
⊠	SB-25-334	9.1	Lean CLAY (CL)	109	15.2	28
▲	SB-25-336	6.1	Lean CLAY (CL)	78	15.3	28

KLEINFELDER

PROJECT NO. 35-8163-05

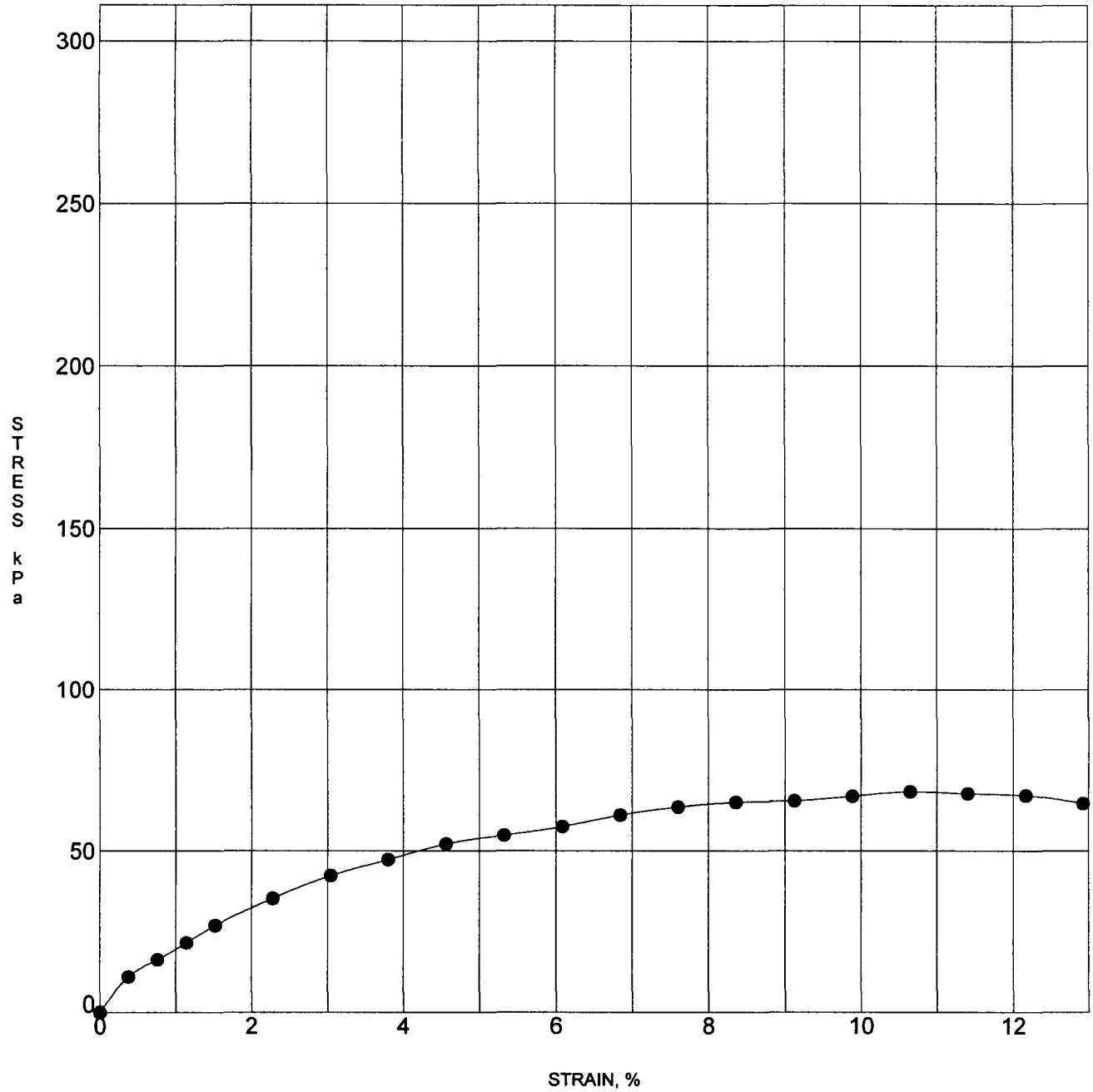
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-927



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-26-337	7.6	Lean CLAY (CL)	68	15.5	29

KLEINFELDER

PROJECT NO. 35-8163-05

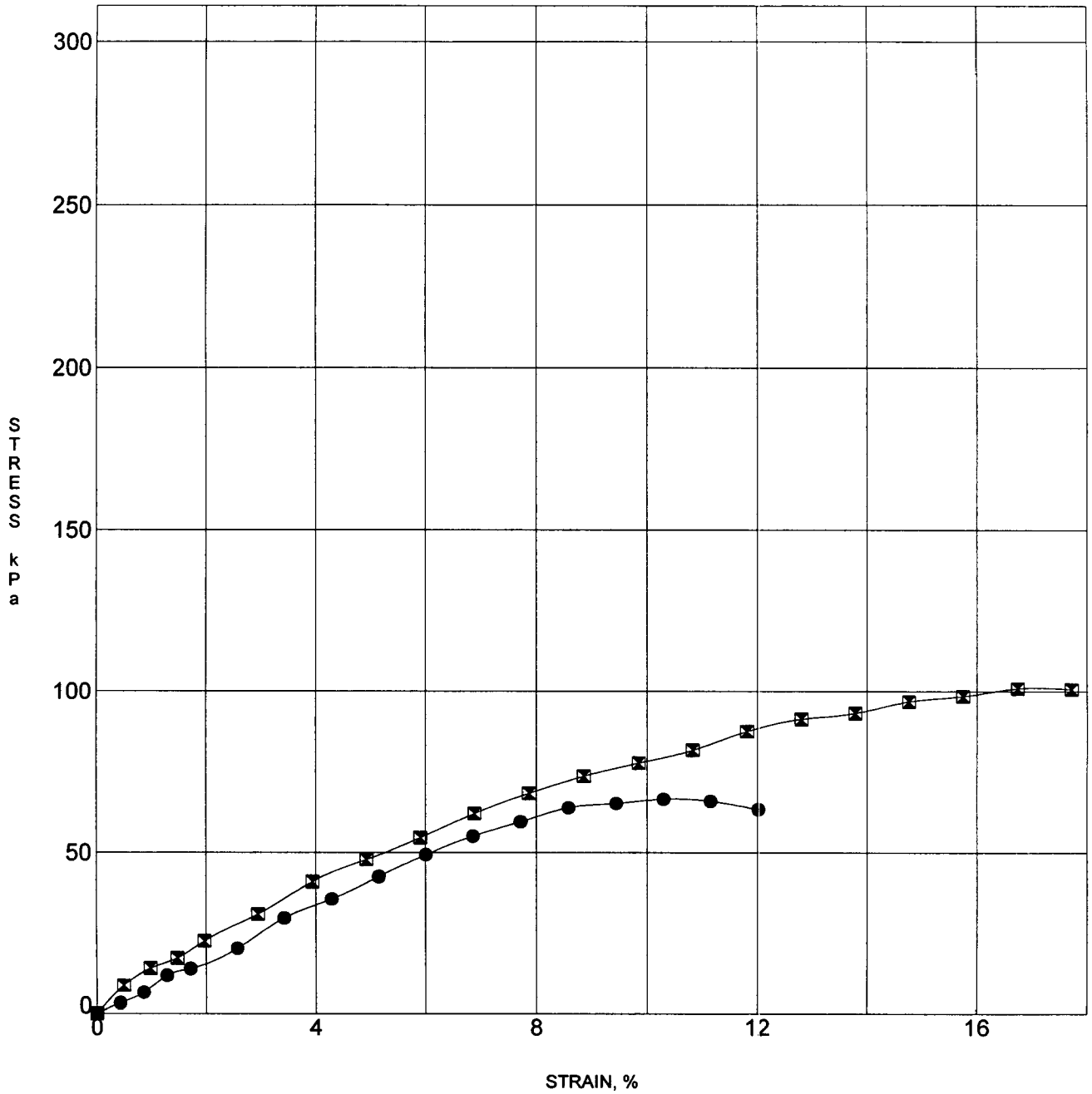
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-928



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-26-339	7.6	SILT (ML)	67	15.4	29
⊠ SB-26-339	10.7	SILT (ML)	101	16.5	25

KLEINFELDER

PROJECT NO. 35-8163-05

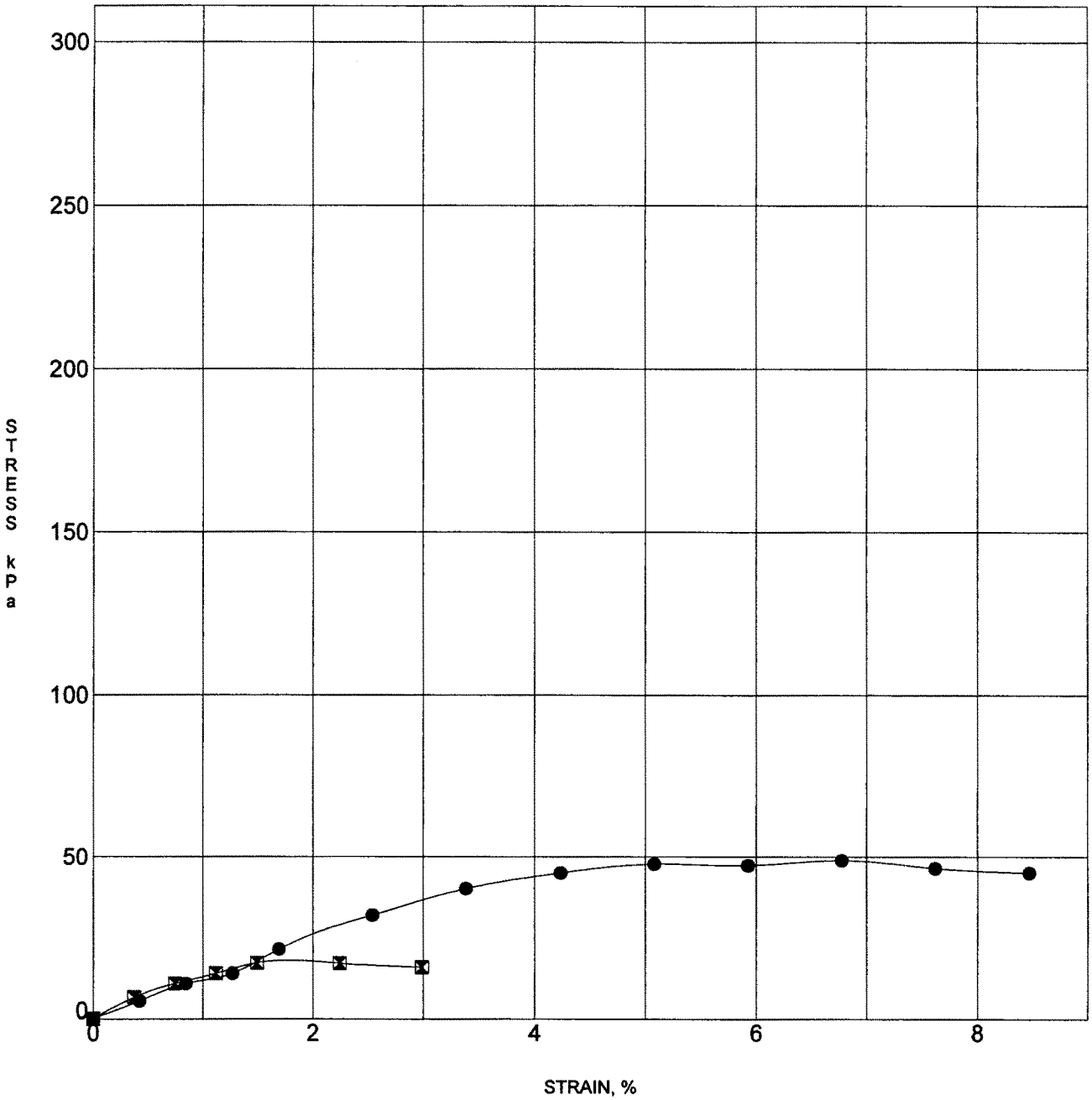
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-929



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-27-345	6.1	Lean CLAY with sand (CL)	49	15.9	27
⊠	SB-27-345	9.1	Lean CLAY with sand (CL)	17	14.9	32

KLEINFELDER

Legacy Parkway - Preferred Alternative

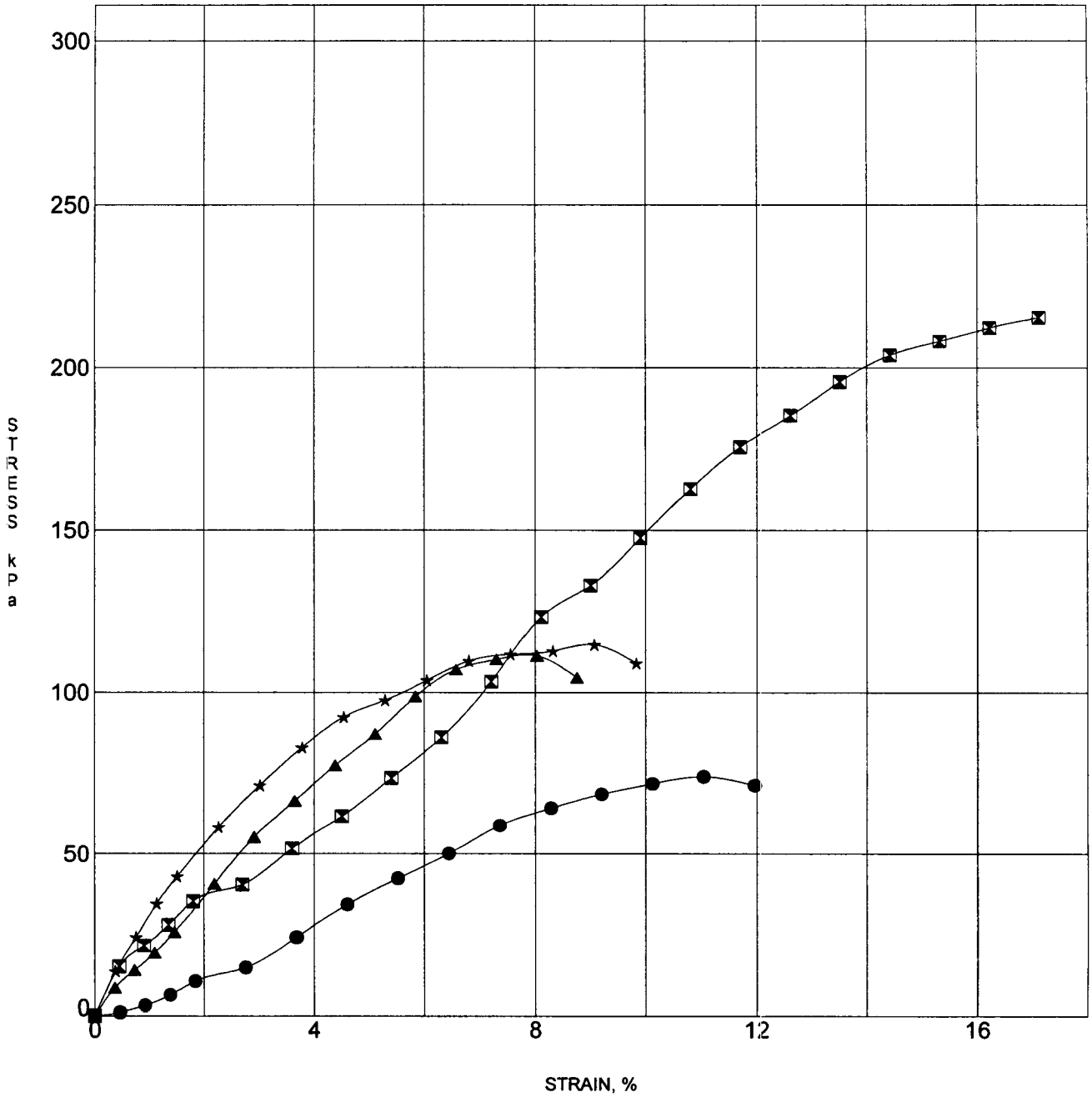
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-930

PROJECT NO. 35-8163-05



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-28-346	3.0	Sandy Lean CLAY (CL)	74	16.7	26
⊠	SB-28-346	12.2	Lean CLAY (CL)	216	17.0	23
▲	SB-28-347	6.1	SILT (ML)	112	15.4	28
★	SB-28-347	12.2	Lean CLAY (CL)	115	15.2	27

KLEINFELDER

PROJECT NO. 35-8163-05

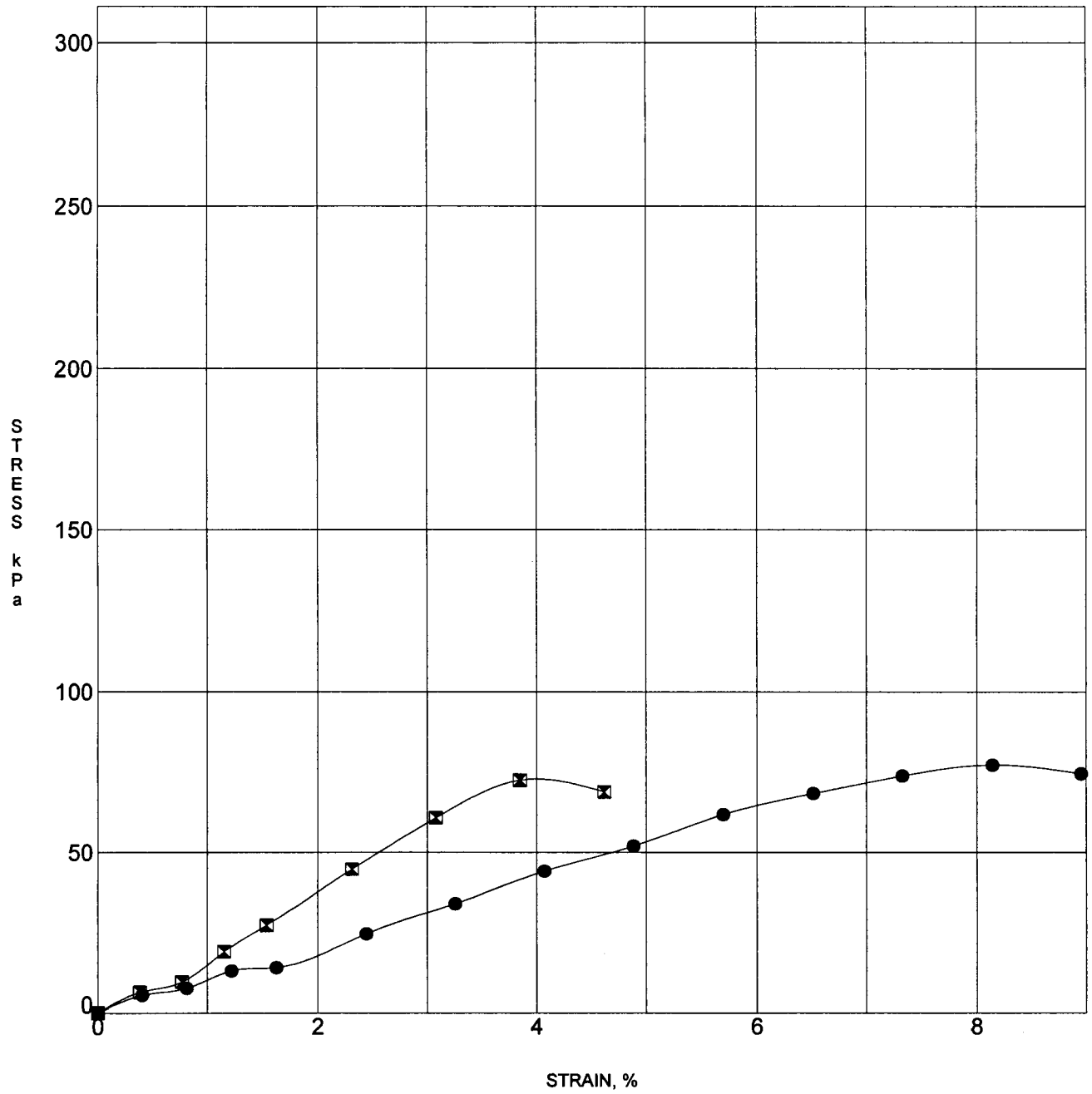
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-931



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-29-348	4.6	SILT (ML)	77	16.5	24
⊠	SB-29-348	10.7	SILT with sand (ML)	73	16.3	23

KLEINFELDER

PROJECT NO. 35-8163-05

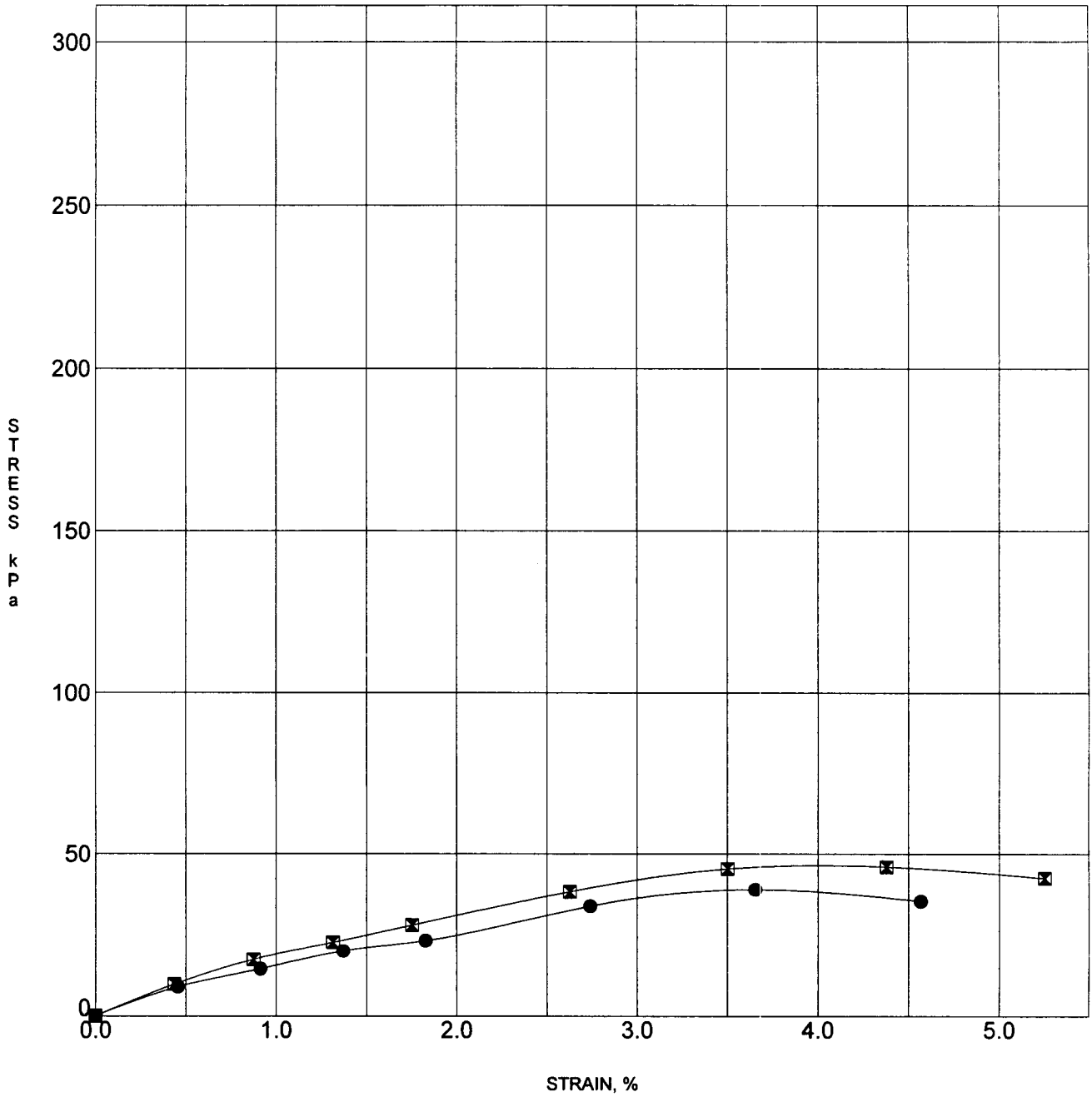
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-932



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-30-351	9.1	SILT with sand (ML)	39	18.2	23
⊠ SB-30-352	9.1	SILT with sand (ML)	46	17.3	23

KLEINFELDER

PROJECT NO. 35-8163-05

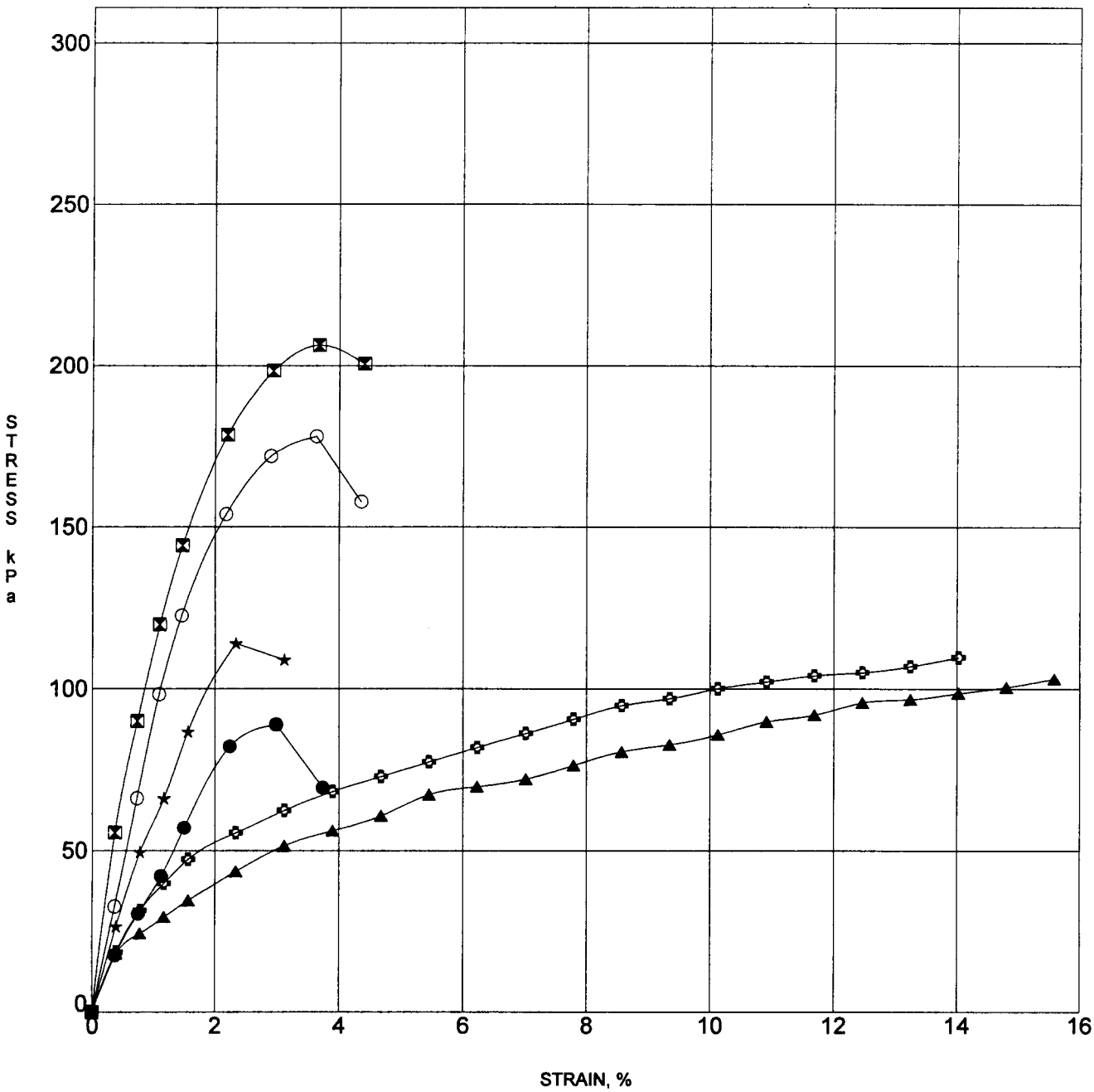
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-933



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	SB-31-353	11.9	Silty SAND (SM)	89	17.2	21
⊠	SB-31-353	30.5	Lean CLAY (CL)	206	12.8	38
▲	SB-31-354	4.6	Lean CLAY (CL)	106	14.0	35
★	SB-31-354	13.4	Lean CLAY with sand (CL)	103	17.1	22
○	SB-31-355	18.1	Lean CLAY (CL)	178	14.7	31
✿	SB-31-355	42.5	Lean CLAY (CL)	110	15.9	26

KLEINFELDER

PROJECT NO. 35-8163-05

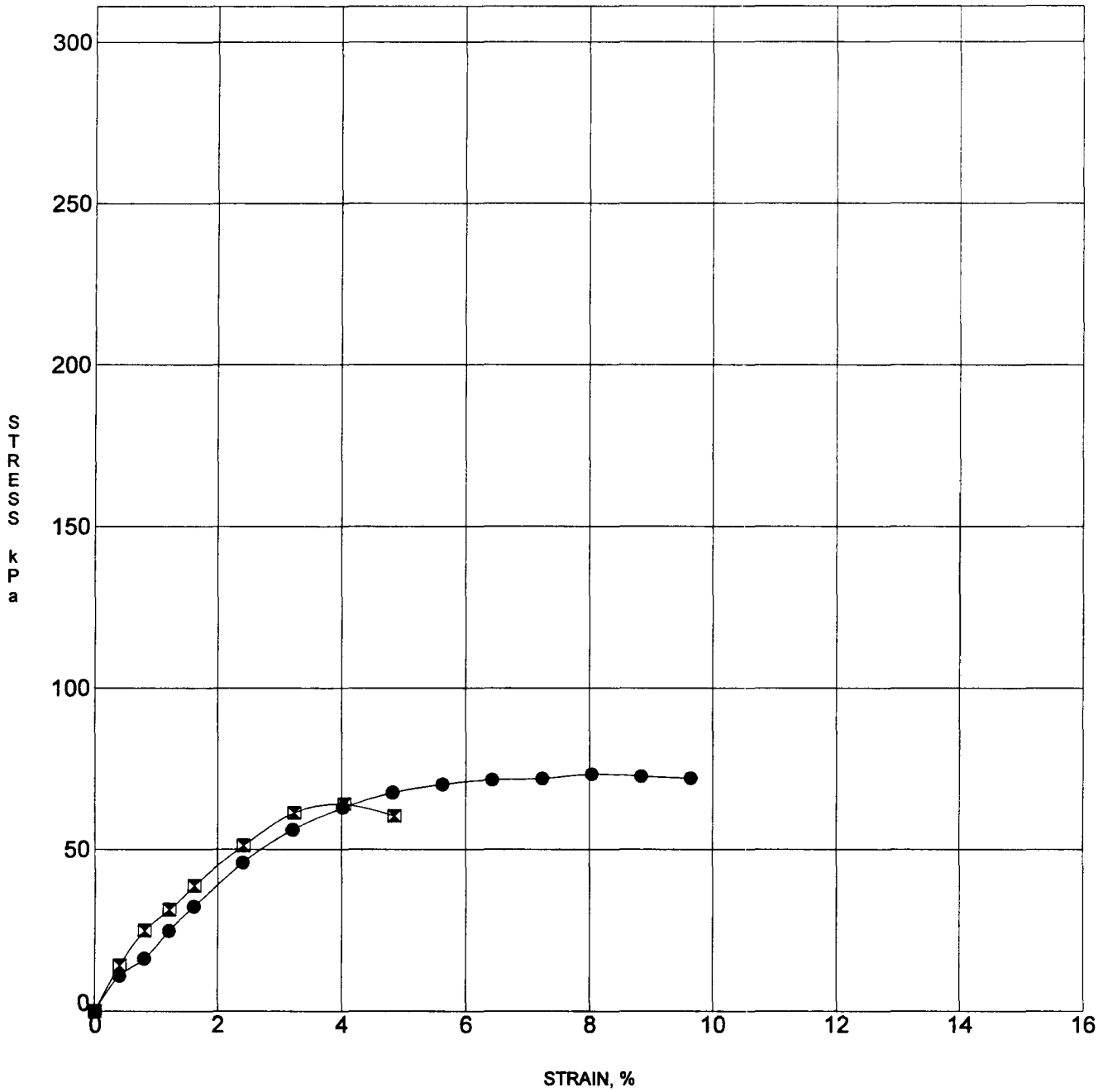
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-934



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● SB-31-356	6.1	Lean CLAY (CL)	73	13.7	37
⊠ SB-31-356	18.3	Fat CLAY (CH)	64	14.6	30

KLEINFELDER

Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

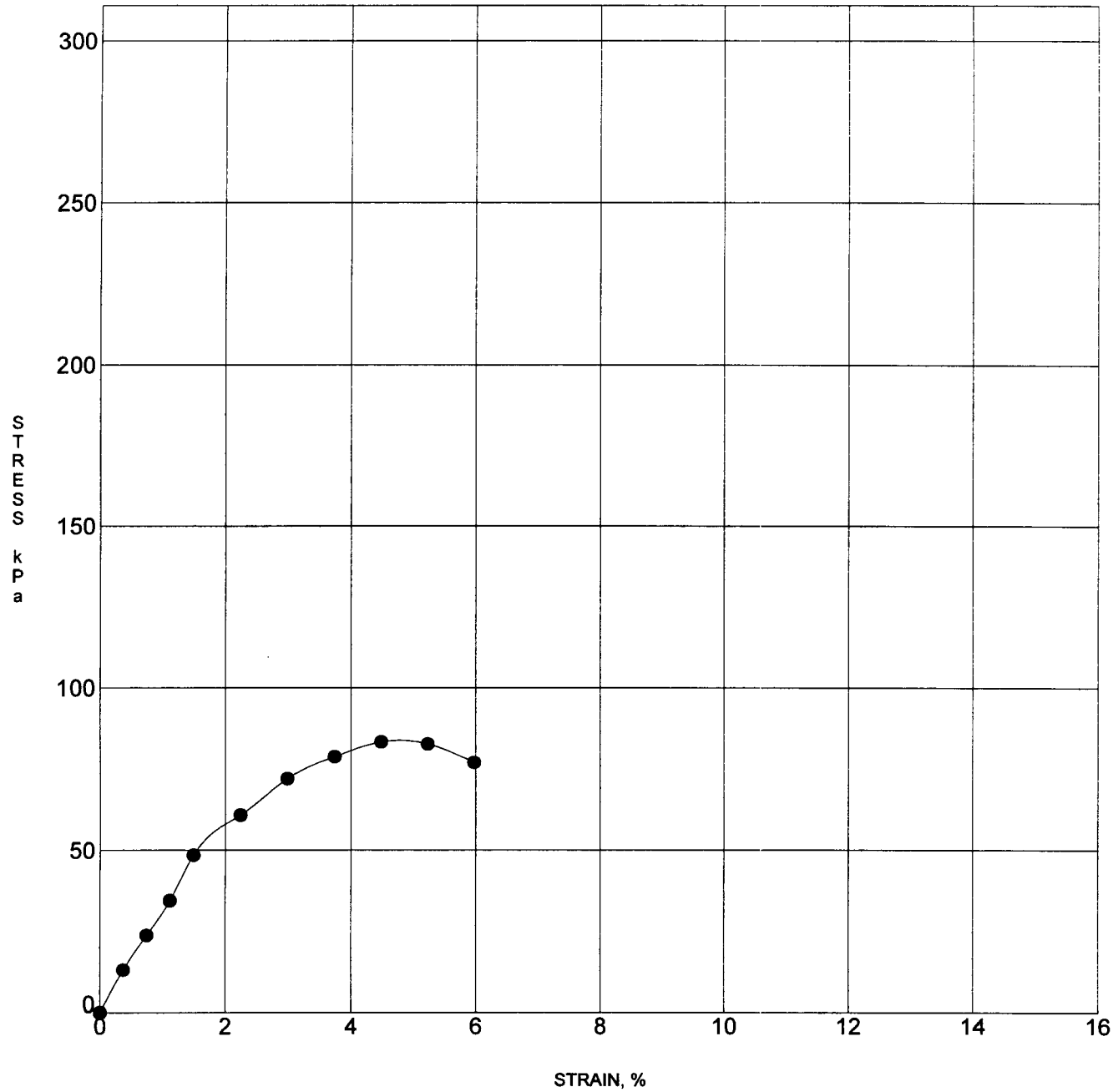
UNCONFINED COMPRESSION TEST

PLATE

K-935

PROJECT NO. 35-8163-05

(This page left blank intentionally.)



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB- 2-241	7.6	SILT (ML)	83	16.7	23

KLEINFELDER

PROJECT NO. 35-8163-05

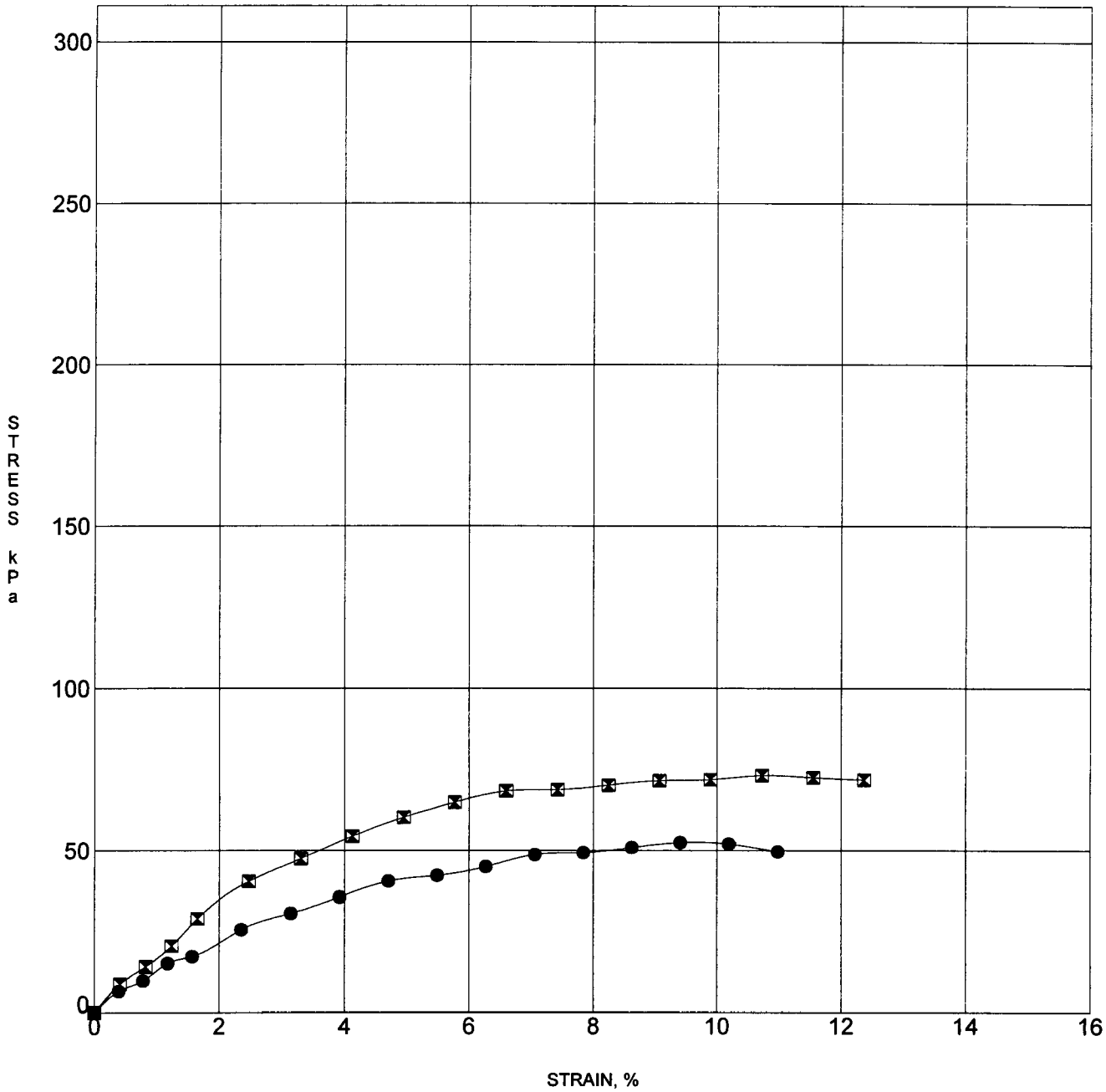
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-937



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m³)	MC%
●	WB- 9-226	3.0	Lean CLAY (CL)	52	14.2	32
⊠	WB- 9-231	7.6	Lean CLAY (CL)	73	14.7	31

KLEINFELDER

PROJECT NO. 35-8163-05

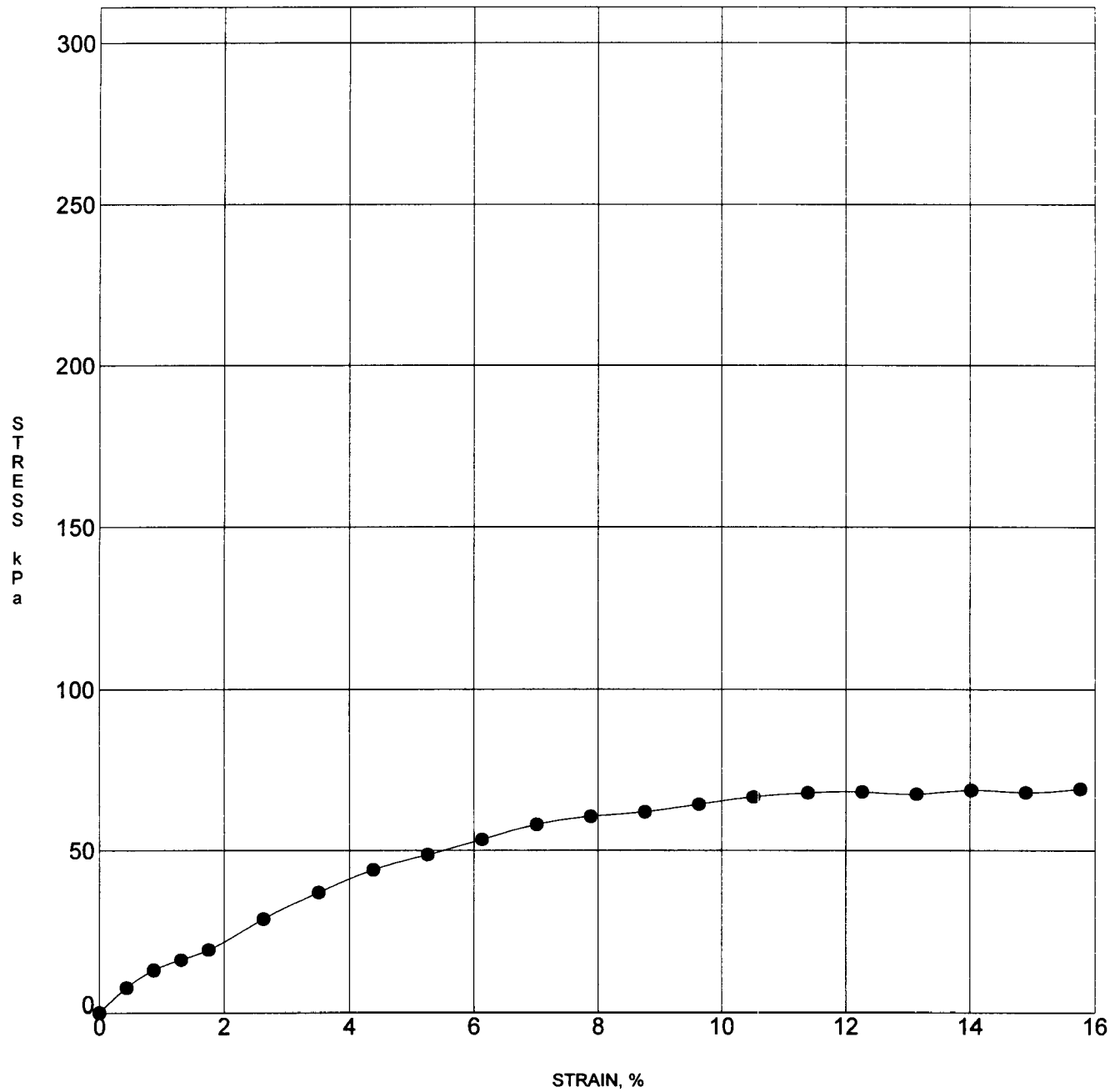
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-938



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● WB-10-233	3.0	Elastic SILT (MH)	69	13.9	34

KLEINFELDER

PROJECT NO. 35-8163-05

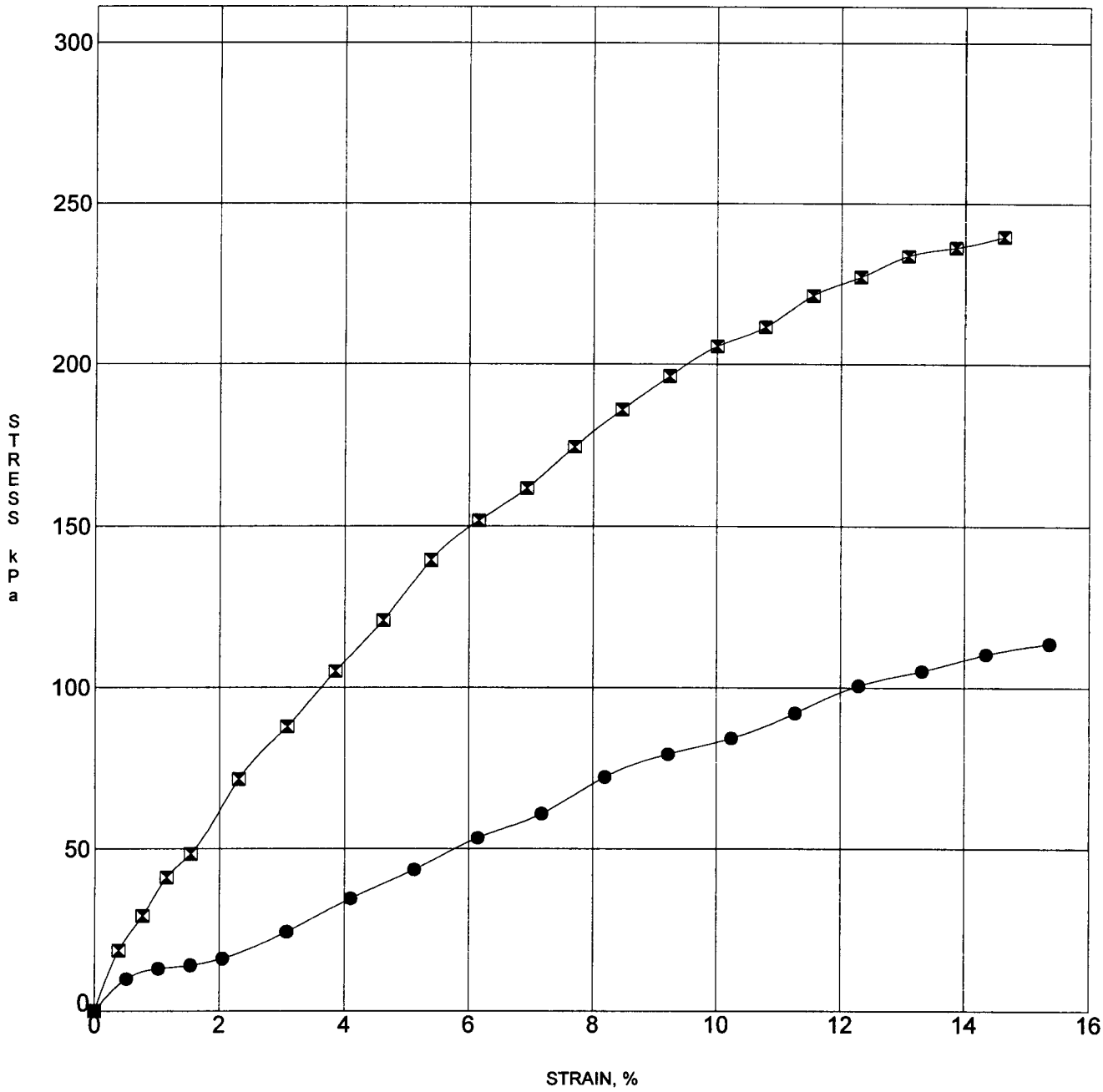
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-939



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-14-238	4.6	SILT (ML)	120	16.0	25
⊠	WB-14-238	10.7	SILT (ML)	240	17.6	22

KLEINFELDER

PROJECT NO. 35-8163-05

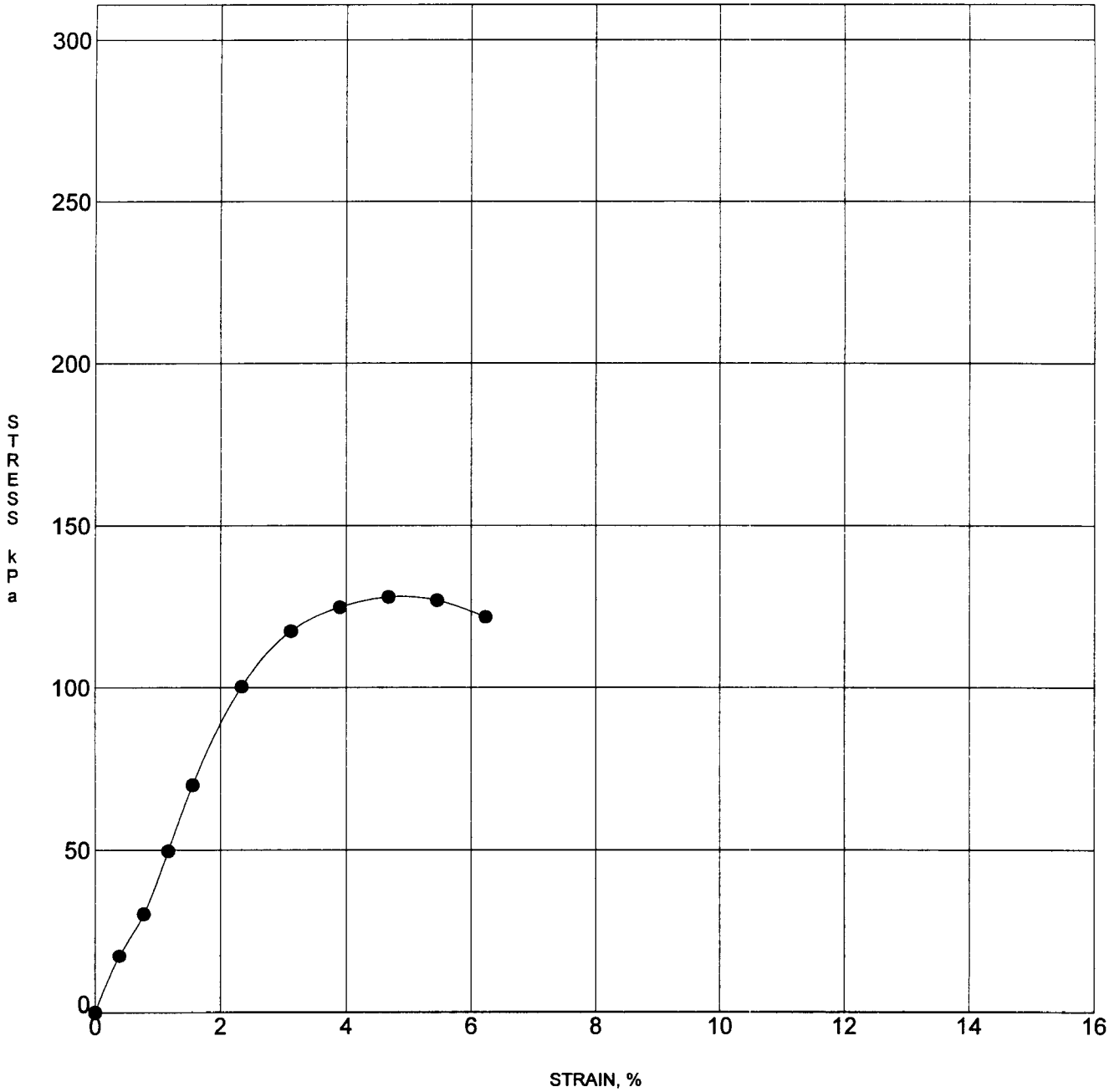
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-940



	Specimen Identification	USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-15-219b 7.6	Lean CLAY (CL)	128	12.3	42

KLEINFELDER

PROJECT NO. 35-8163-05

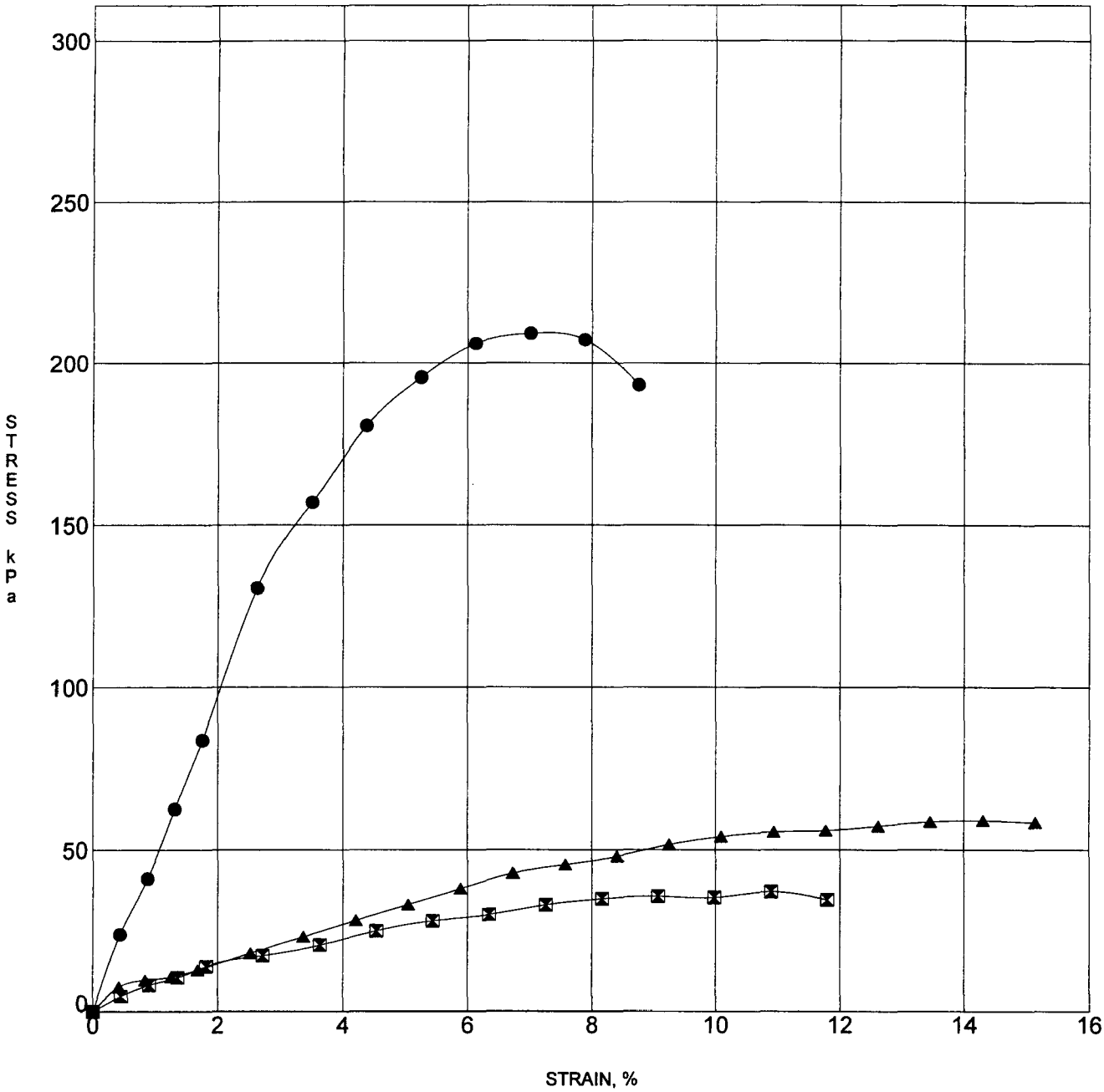
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-941



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-16-222b	3.0	Lean CLAY (CL)	209	16.6	24
⊠	WB-16-222b	7.6	Lean CLAY (CL)	37	13.0	42
▲	WB-16-225	8.2	Fat CLAY (CH)	59	13.0	42

KLEINFELDER

Legacy Parkway - Preferred Alternative

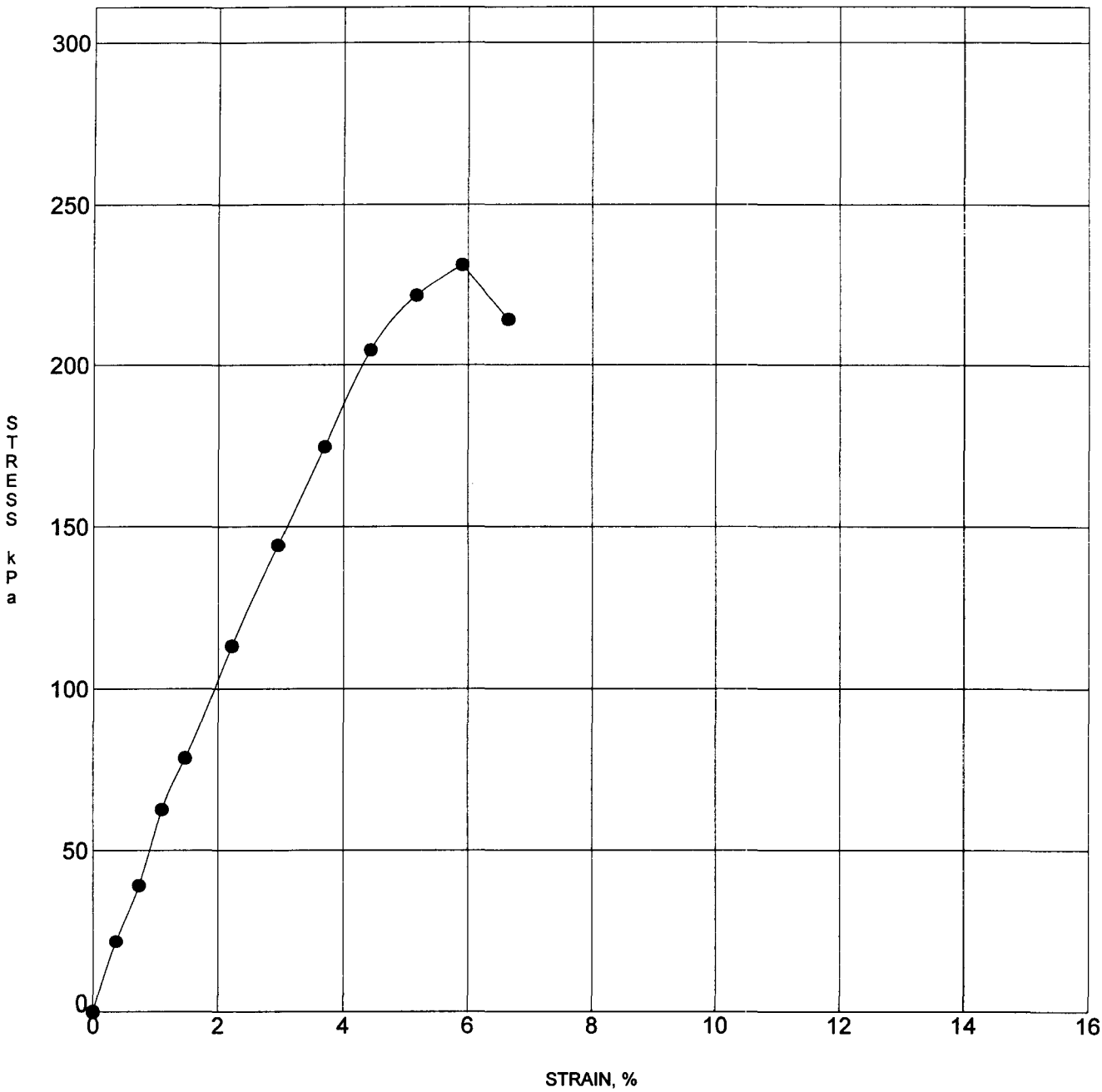
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-942

PROJECT NO. **35-8163-05**



Specimen Identification	USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB-17-215 1.5	Lean CLAY (CL)	231	16.0	25

KLEINFELDER

PROJECT NO. 35-8163-05

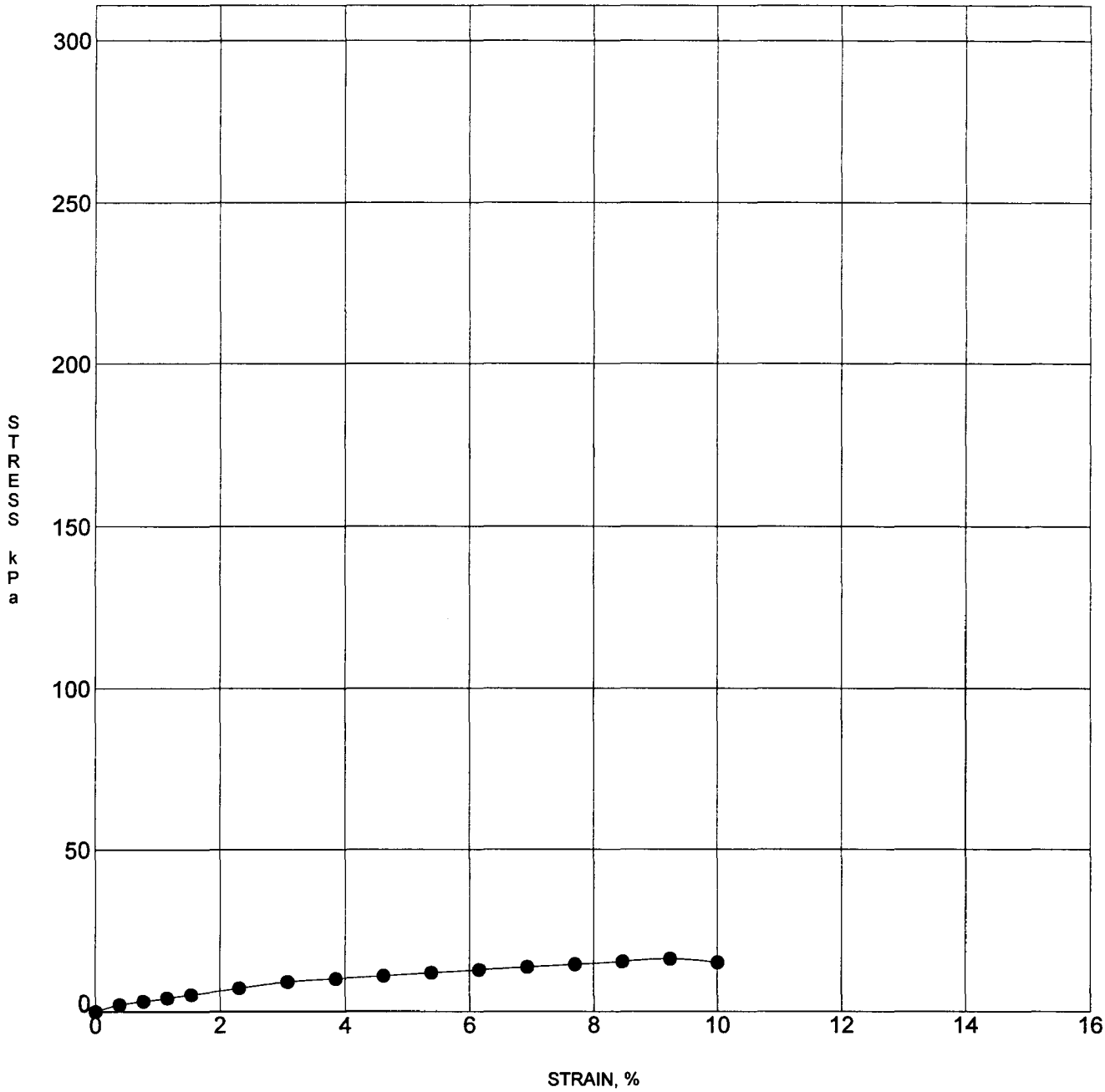
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-943



Specimen Identification	USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB-18-218 7.6	Lean CLAY (CL)	16	12.2	43

KLEINFELDER

PROJECT NO. 35-8163-05

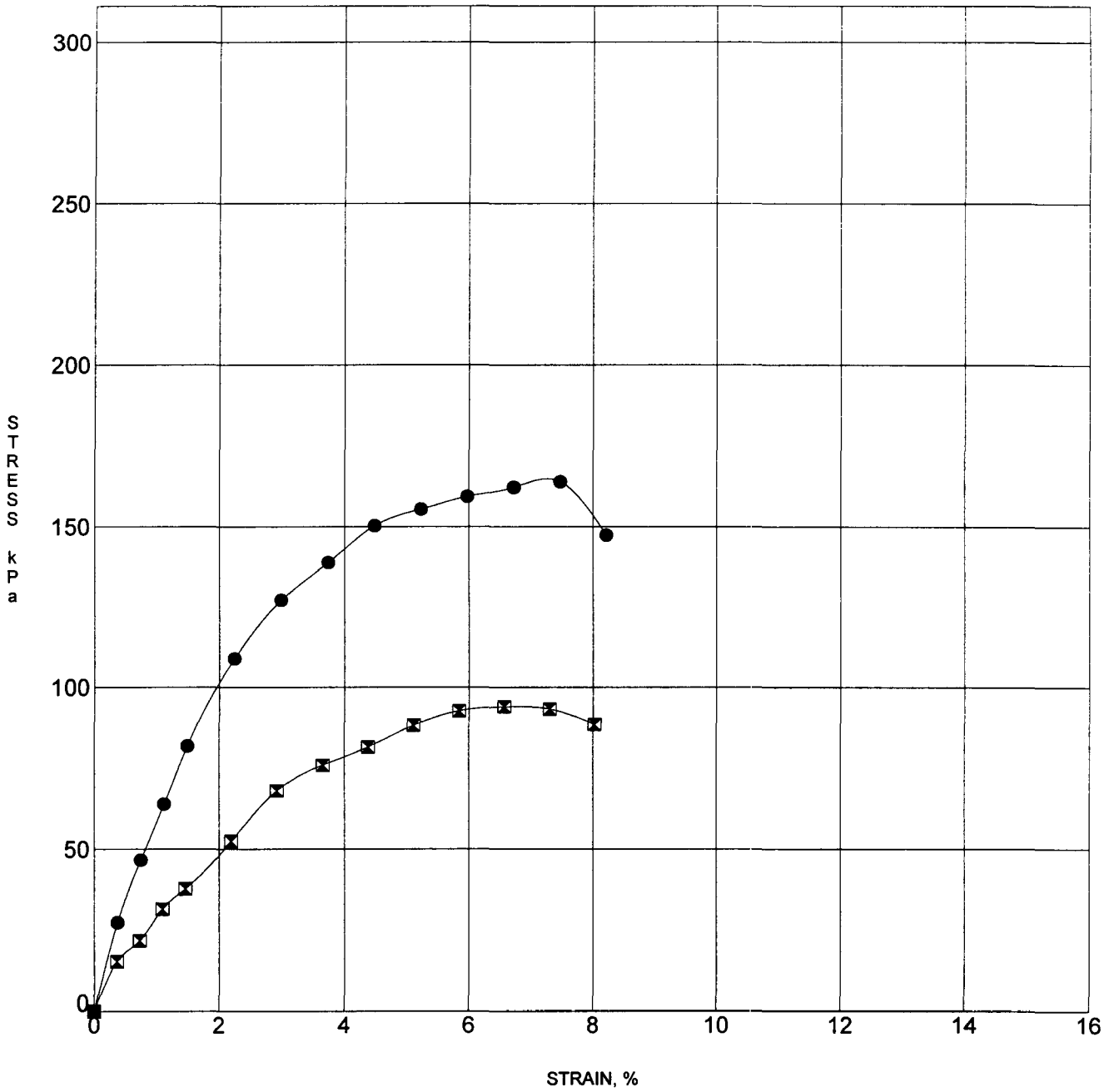
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-944



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-20-209	6.1	Lean CLAY (CL)	164	15.3	28
⊠	WB-20-210	7.6	Lean CLAY (CL)	94	11.2	51

KLEINFELDER

PROJECT NO. 35-8163-05

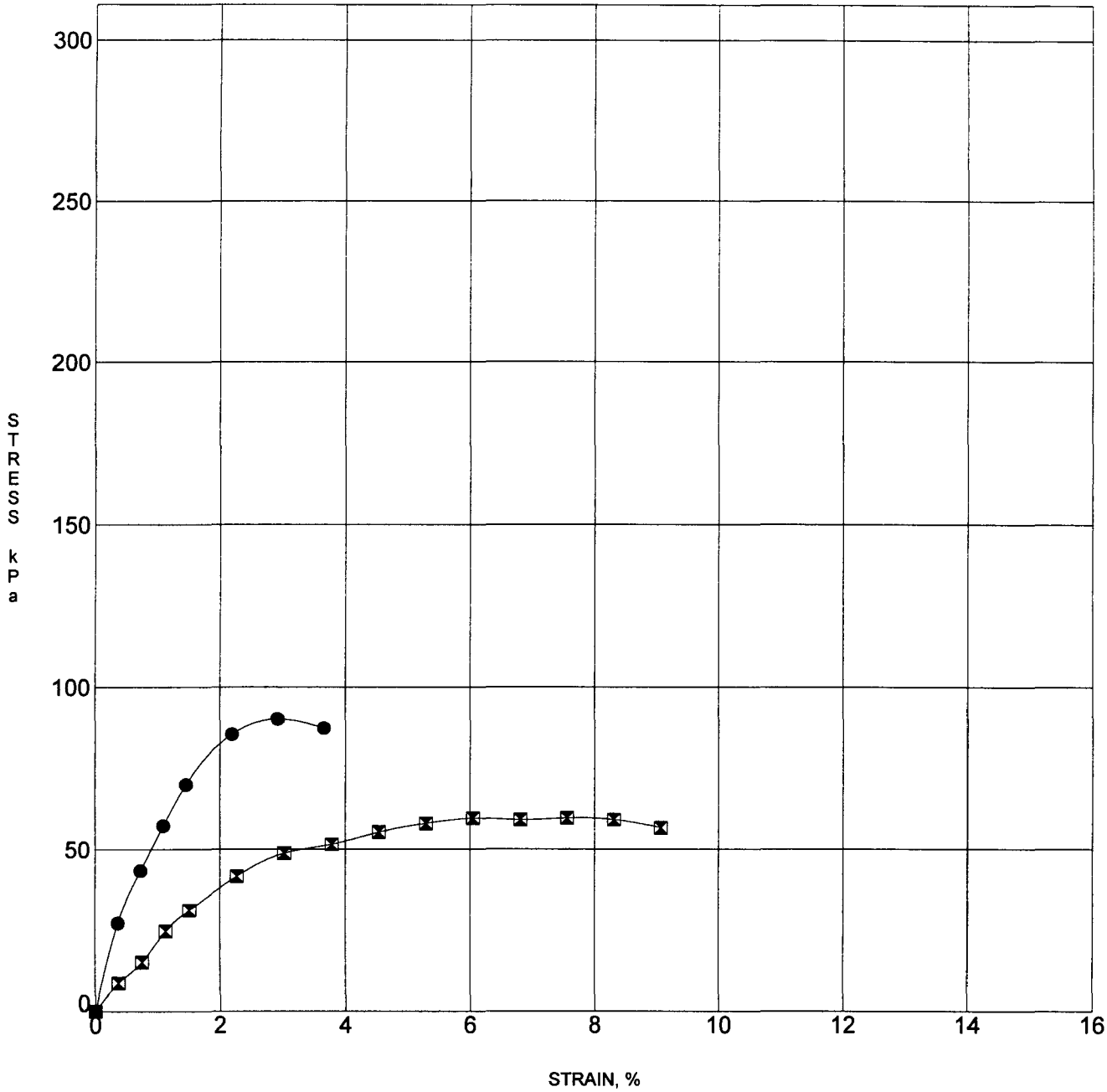
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-945



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB-24-202	4.6	Lean CLAY (CL)	90	14.1	35
⊠ WB-24-202	9.1	Fat CLAY (CH)	60	11.3	54

KLEINFELDER

Legacy Parkway - Preferred Alternative

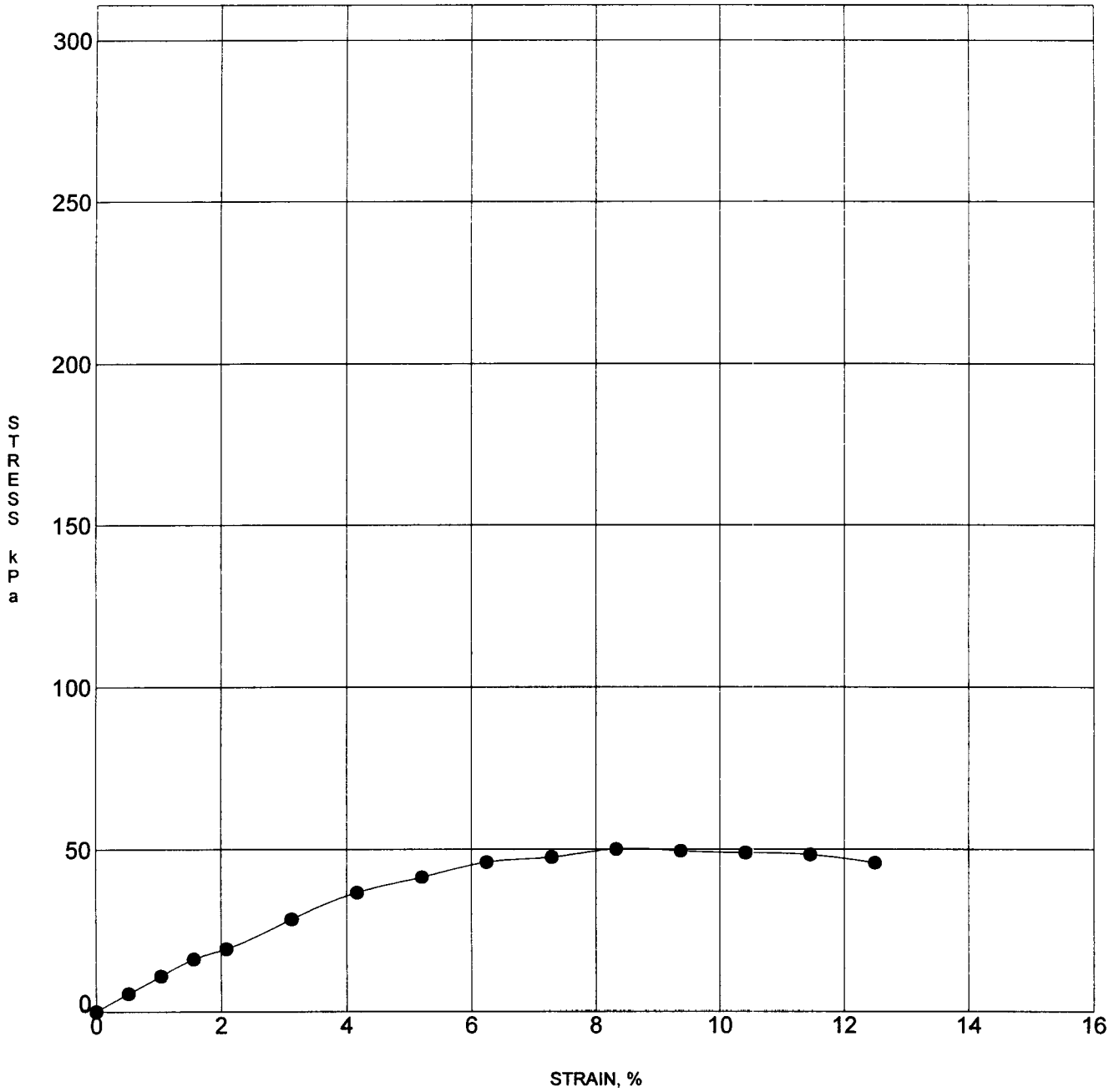
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-946

PROJECT NO. **35-8163-05**



Specimen Identification	USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB-25-201 9.1	Lean CLAY (CL)	50	13.7	39

KLEINFELDER

PROJECT NO. 35-8163-05

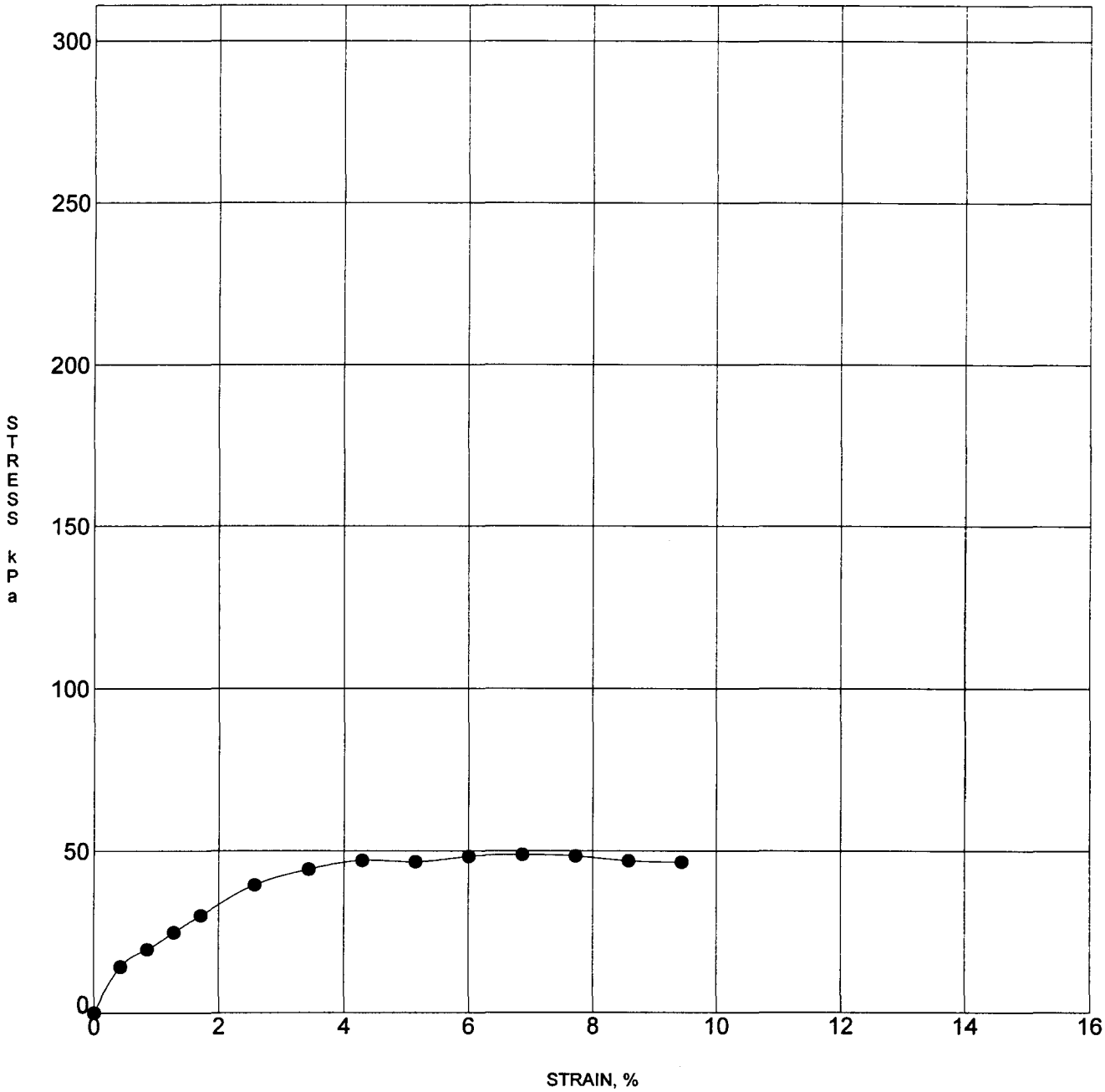
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-947



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● WB-26-314	6.1	Fat CLAY (CH)	49	10.2	62

KLEINFELDER

PROJECT NO. 35-8163-05

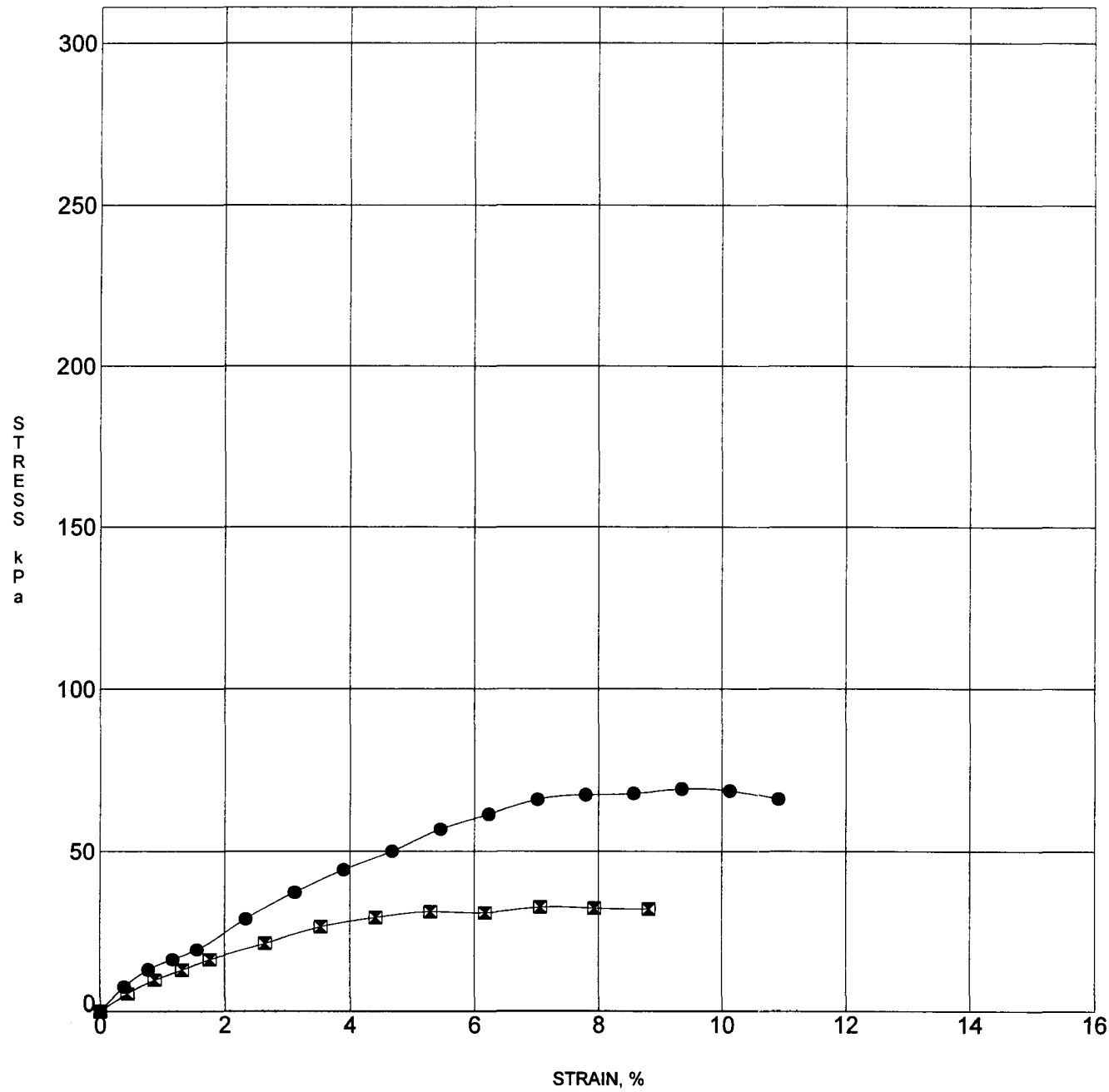
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-948



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-27-317	1.5	Sandy SILT (ML)	69	14.3	32
⊠	WB-27-317	4.6	Lean CLAY (CL)	32	11.7	47

KLEINFELDER

Legacy Parkway - Preferred Alternative

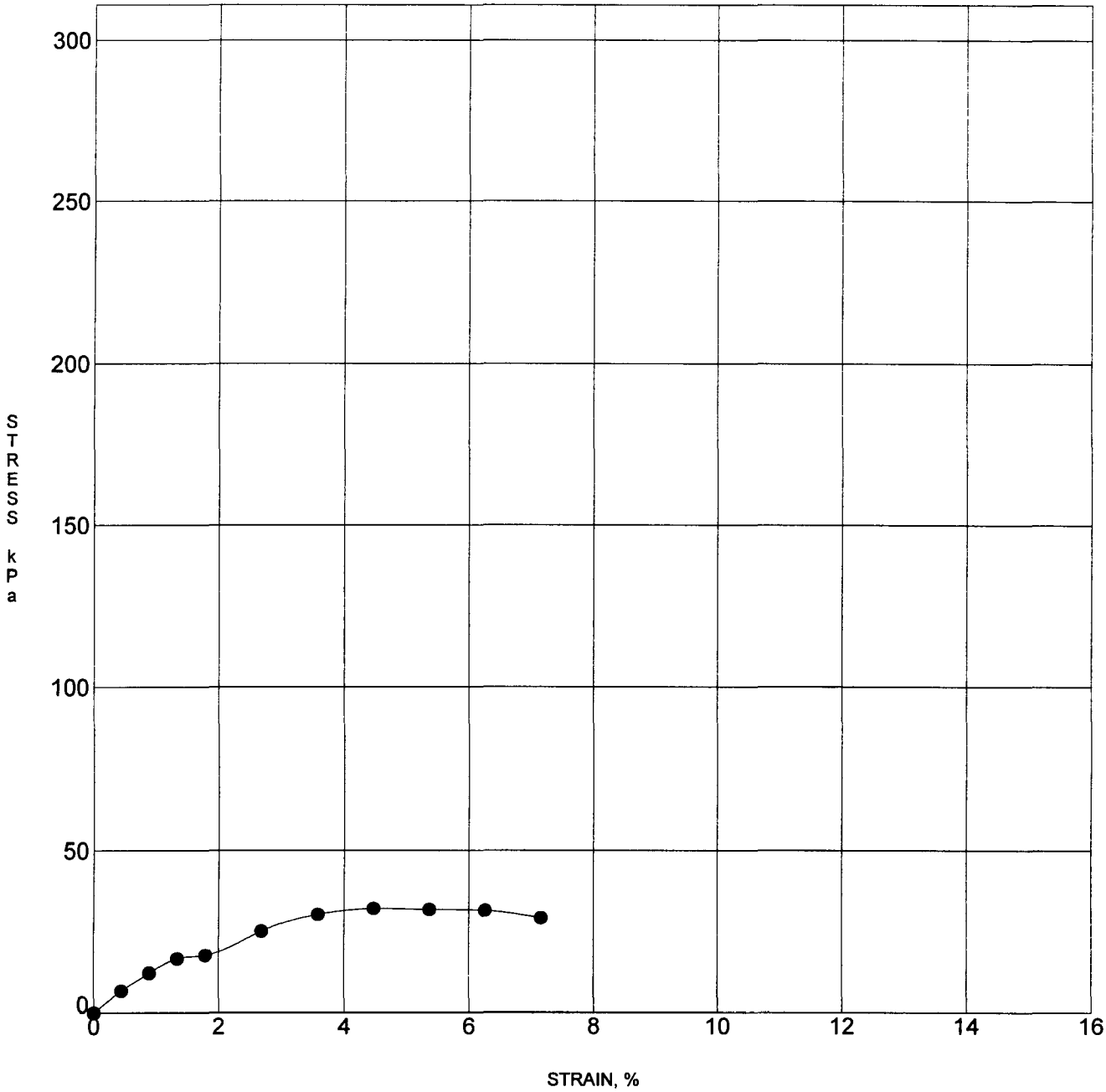
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-949

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● WB-28-319	1.5	SILT (ML)	32	14.0	34

KLEINFELDER

PROJECT NO. 35-8163-05

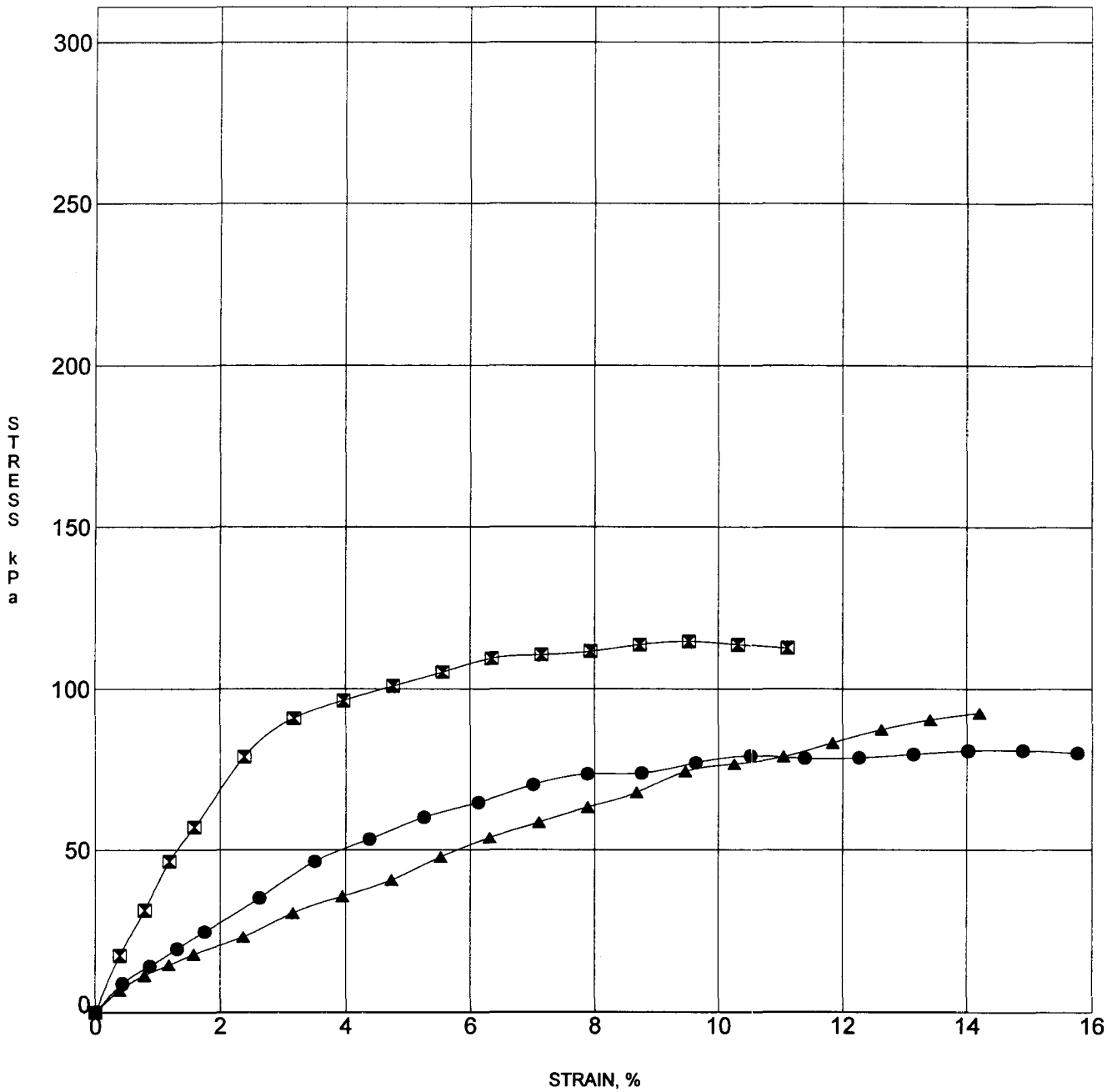
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-950



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	WB-29-320	9.1	Lean CLAY (CL)	81	14.5	32
⊠	WB-29-320	12.2	Lean CLAY (CL)	115	14.0	36
▲	WB-29-322	10.7	Lean CLAY (CL)	93	16.9	24

KLEINFELDER

PROJECT NO. 35-8163-05

Legacy Parkway - Preferred Alternative

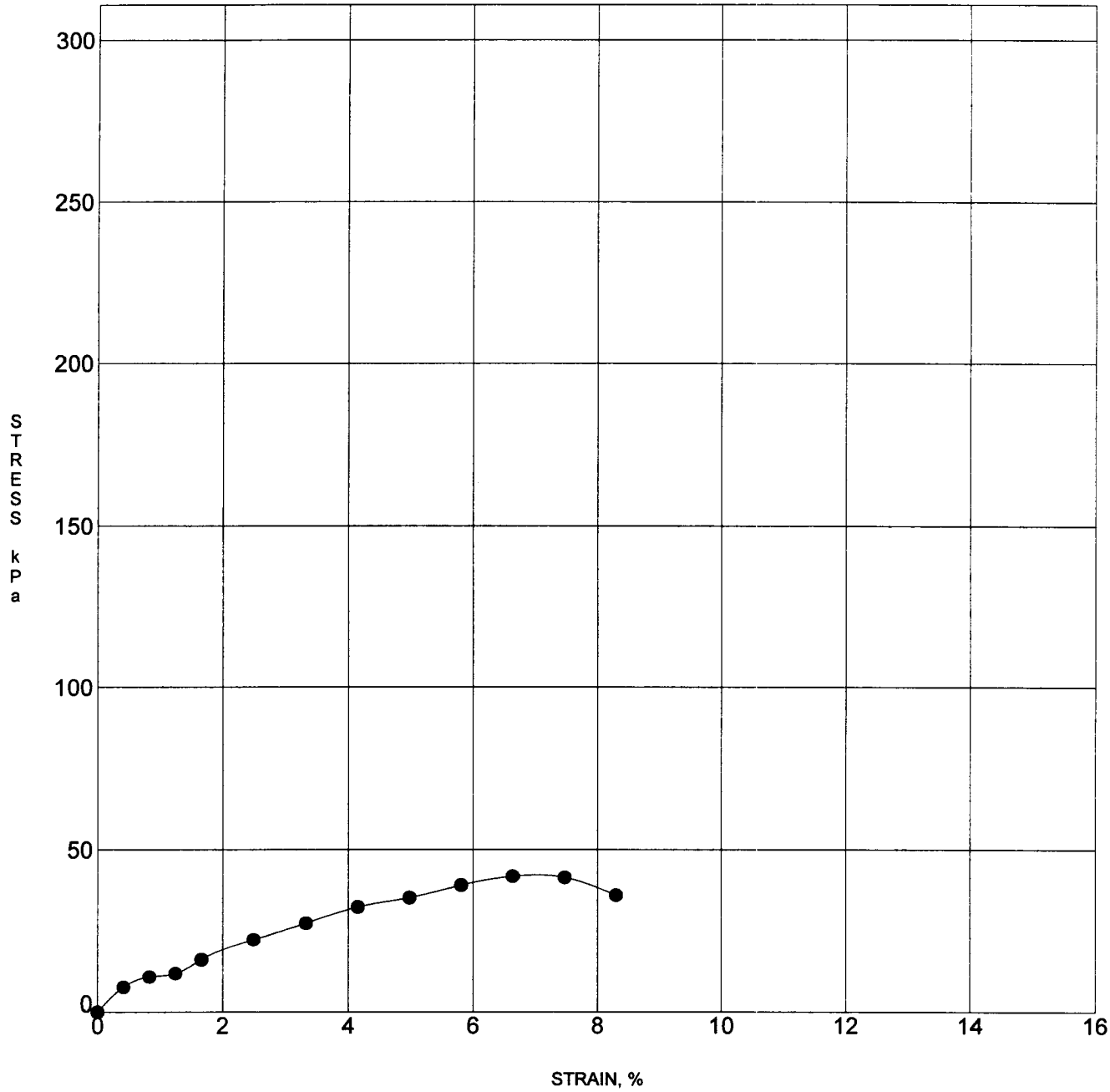
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-951

(This page left blank intentionally.)



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-357 10.7		Lean CLAY with sand (CL)	42	15.5	26

KLEINFELDER

PROJECT NO. 35-8163-05

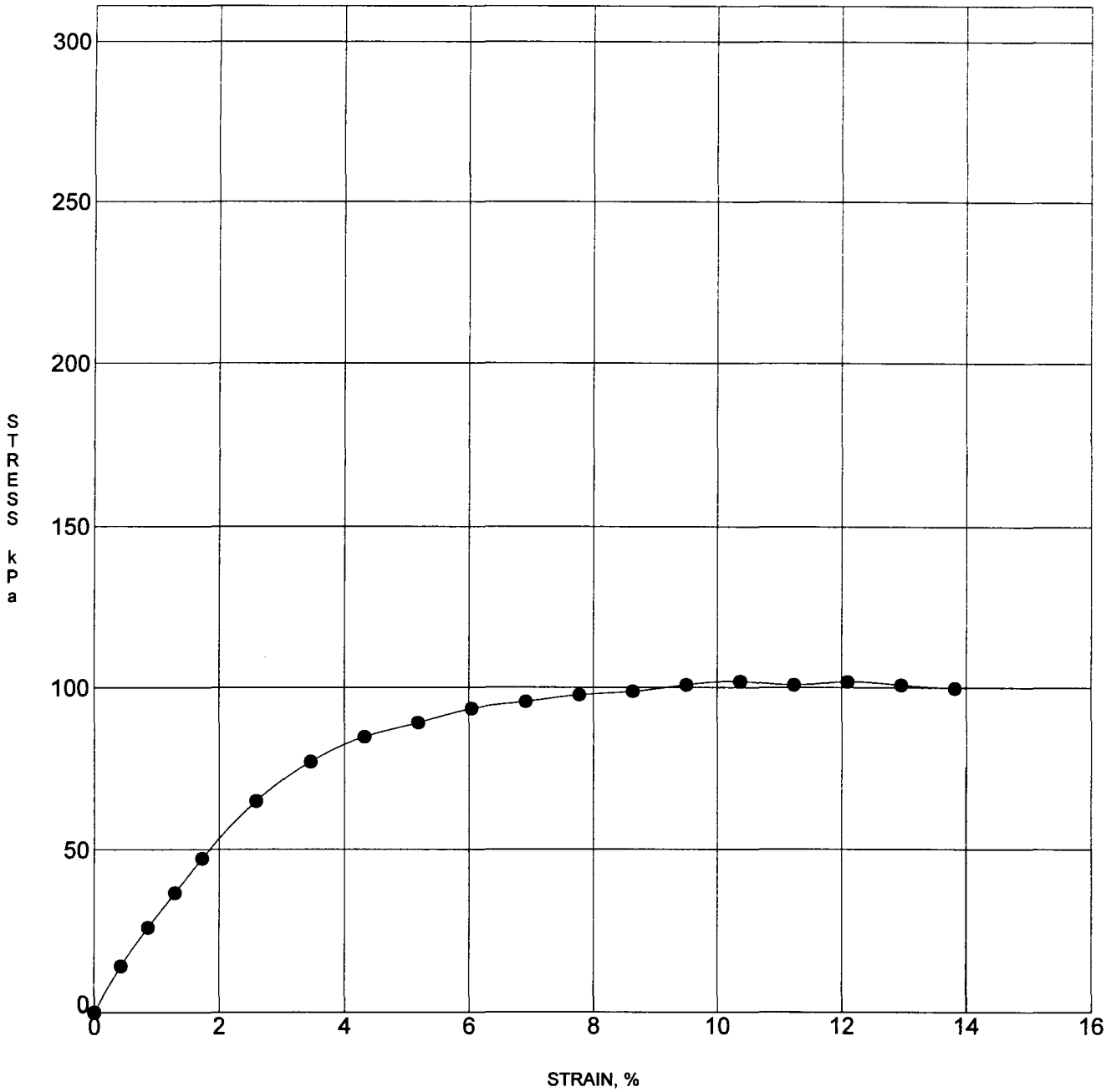
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-953



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-358	15.2	Lean CLAY (CL)	102	14.2	32

KLEINFELDER

PROJECT NO. 35-8163-05

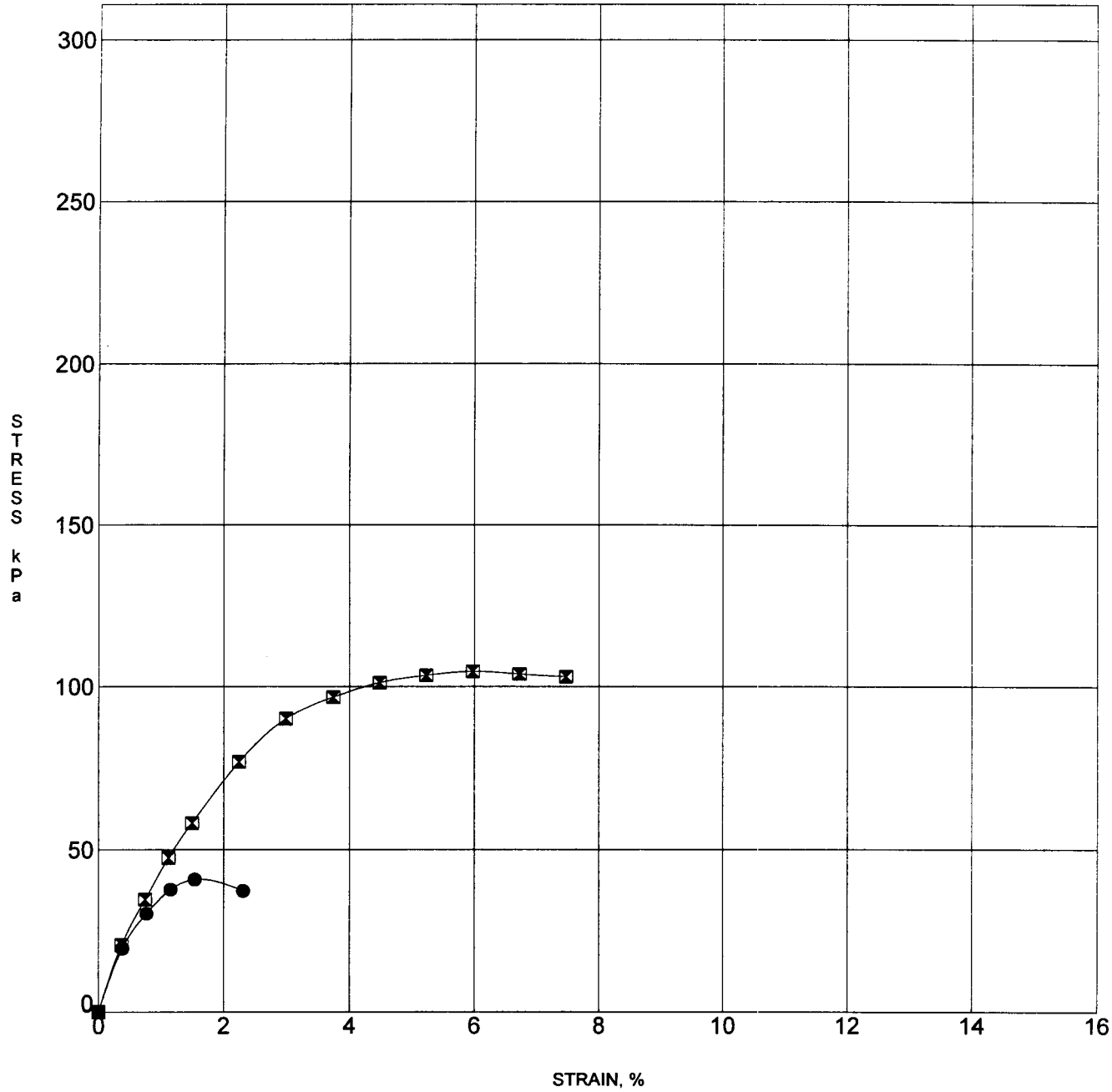
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-954



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-359	4.6	Fat CLAY (CH)	41	11.1	54
⊠	RB-359	16.8	Fat CLAY (CH)	105	12.3	42

KLEINFELDER

PROJECT NO. 35-8163-05

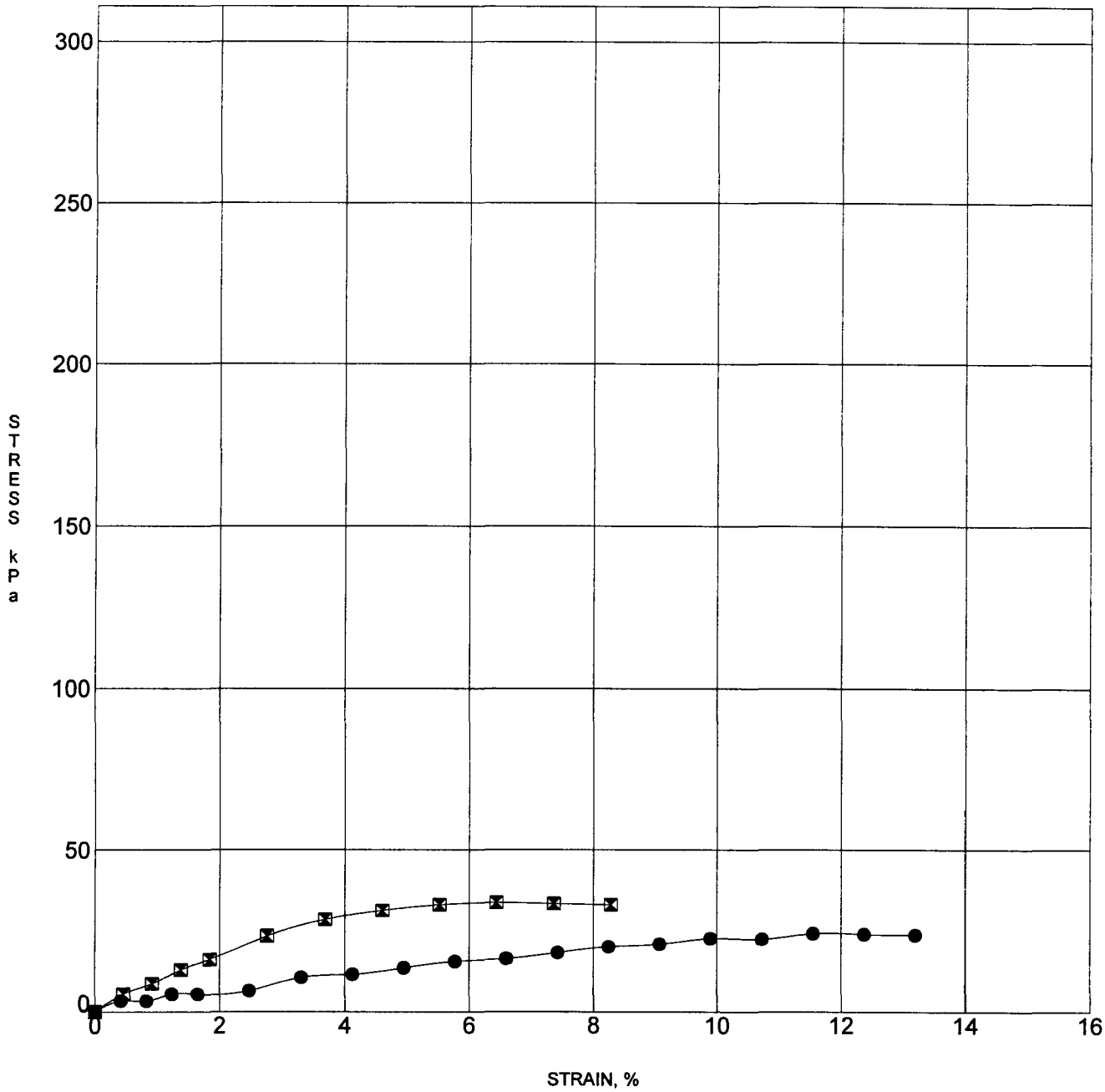
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-955



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-360	4.6	Lean CLAY (CL)	24	12.7	42
⊠	RB-360	7.6	Lean CLAY (CL)	34	12.0	41

KLEINFELDER

PROJECT NO. 35-8163-05

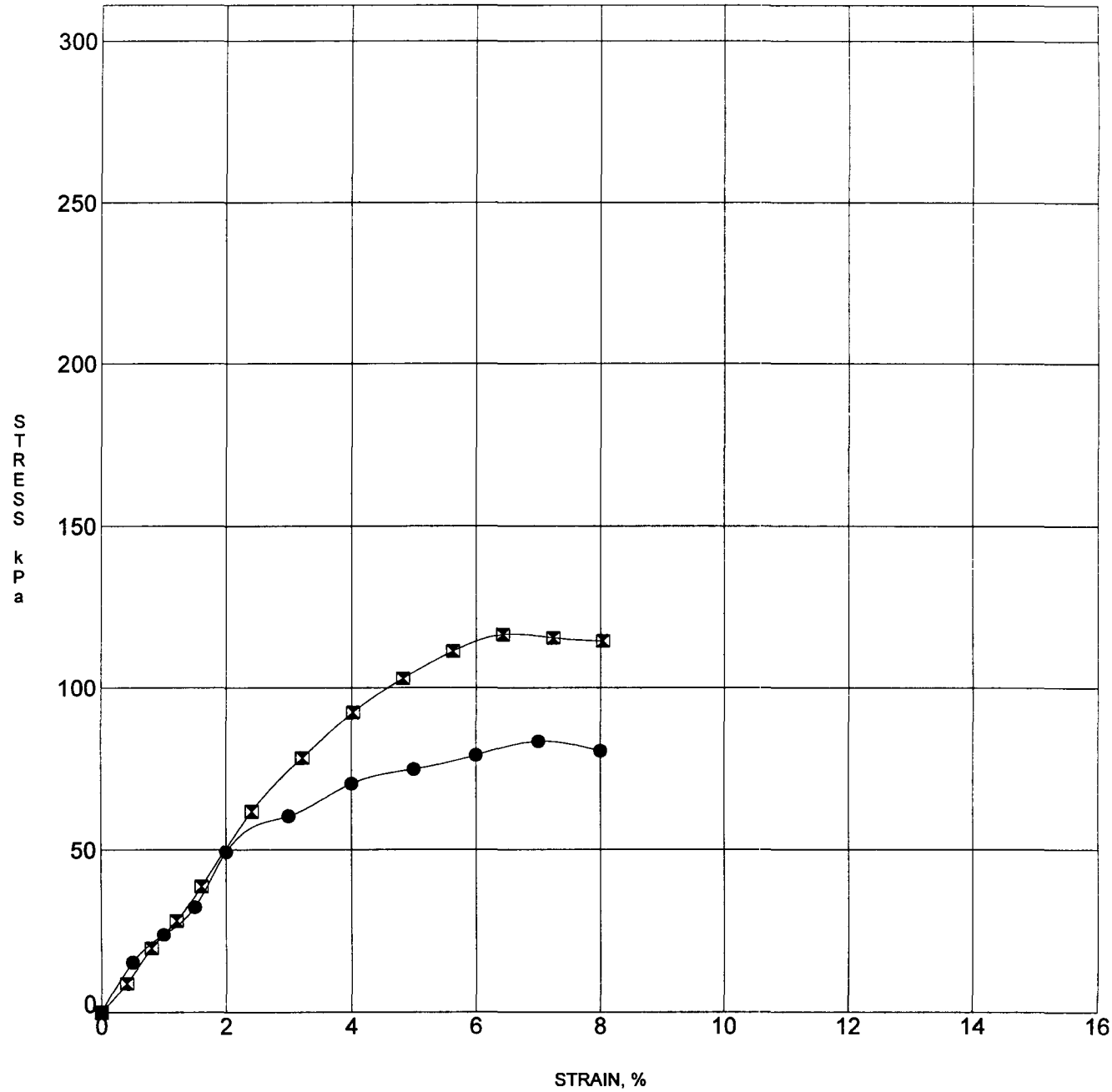
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-956



Specimen Identification			USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	RB-361	10.7	Lean CLAY (CL)	83	15.8	24
⊠	RB-361	21.3	Lean CLAY (CL)	117	15.1	29

KLEINFELDER

Legacy Parkway - Preferred Alternative

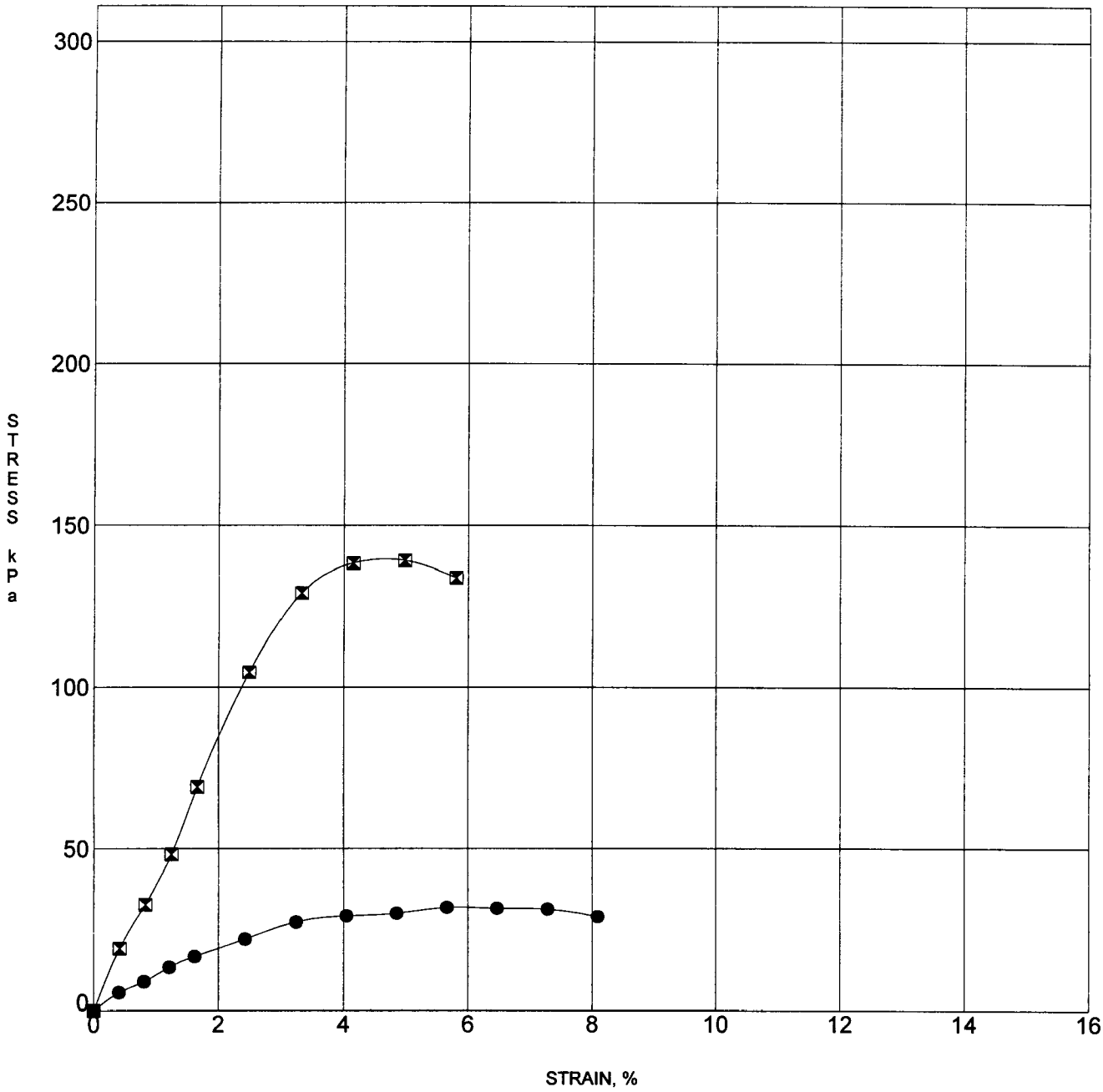
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-957

PROJECT NO. **35-8163-05**



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-362	7.6	Lean CLAY (CL)	32	13.1	43
⊠	RB-362	19.8	Lean CLAY (CL)	139	13.1	39

KLEINFELDER

PROJECT NO. 35-8163-05

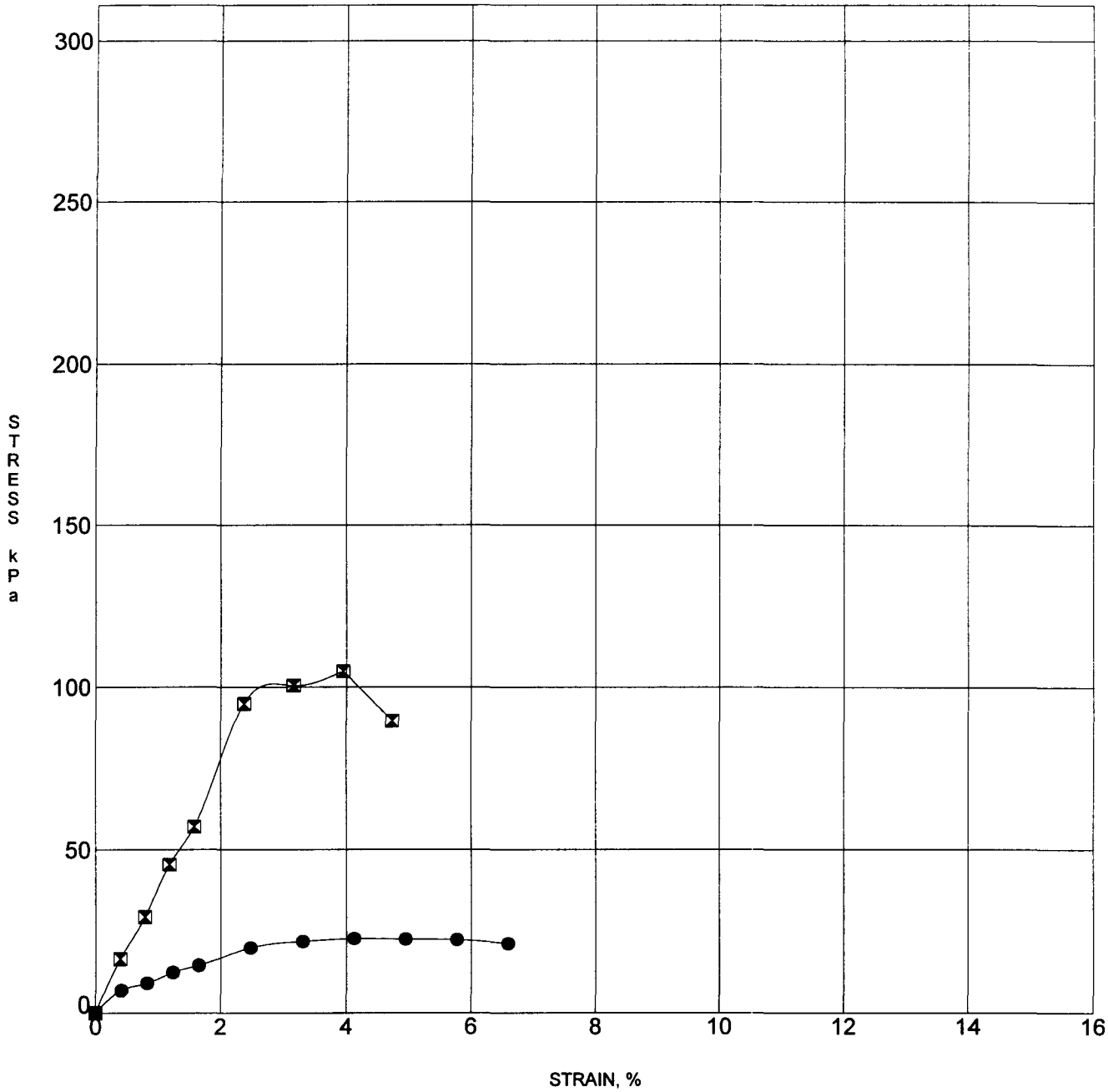
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-958



Specimen Identification			USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	RB-363	6.1	Lean CLAY (CL)	23	11.9	48
⊠	RB-363	18.3	Fat CLAY (CH)	105	11.4	51

KLEINFELDER

PROJECT NO. 35-8163-05

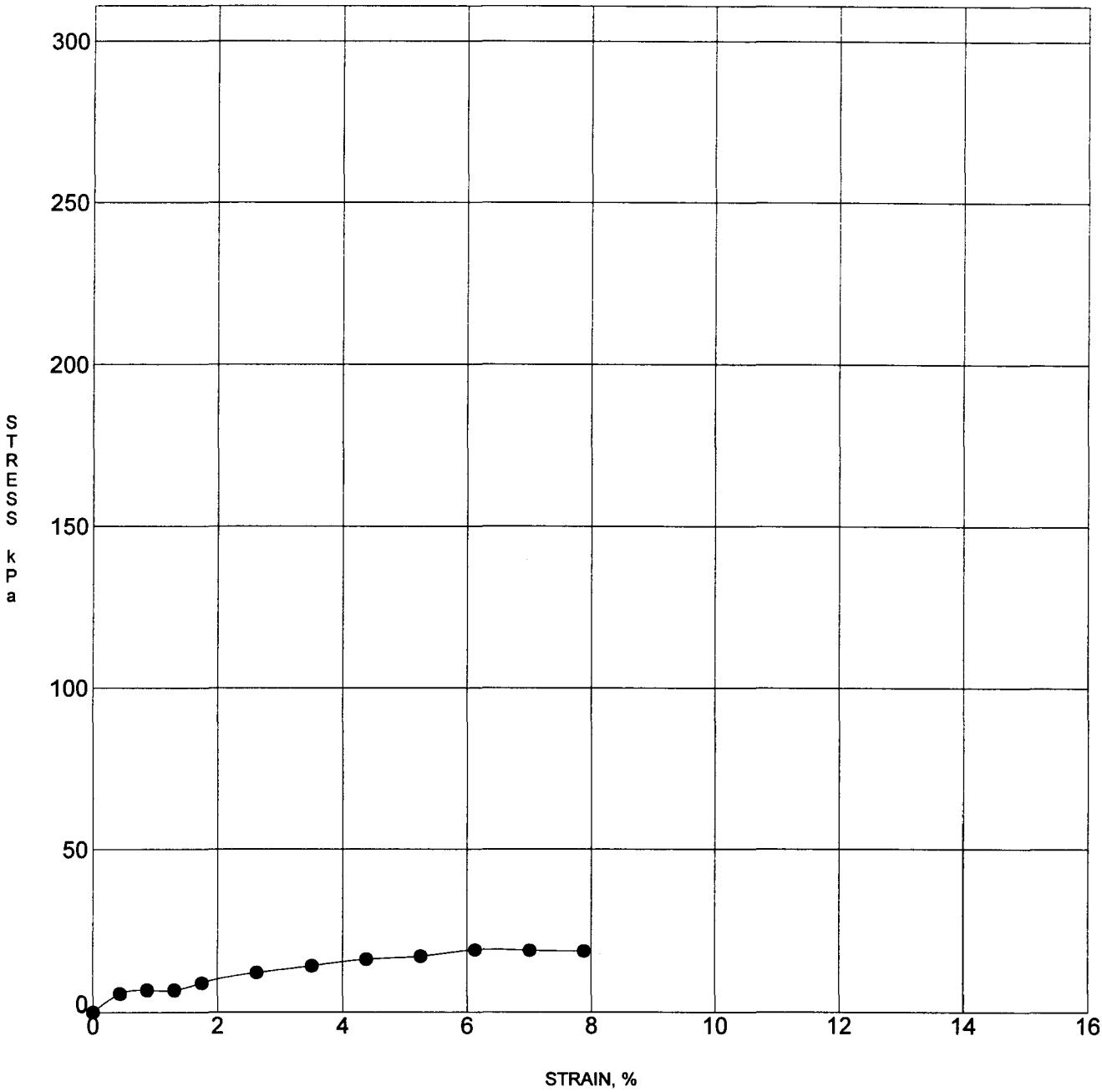
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-959



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-364	4.6	Lean CLAY (CL)	19	12.8	39

KLEINFELDER

PROJECT NO. 35-8163-05

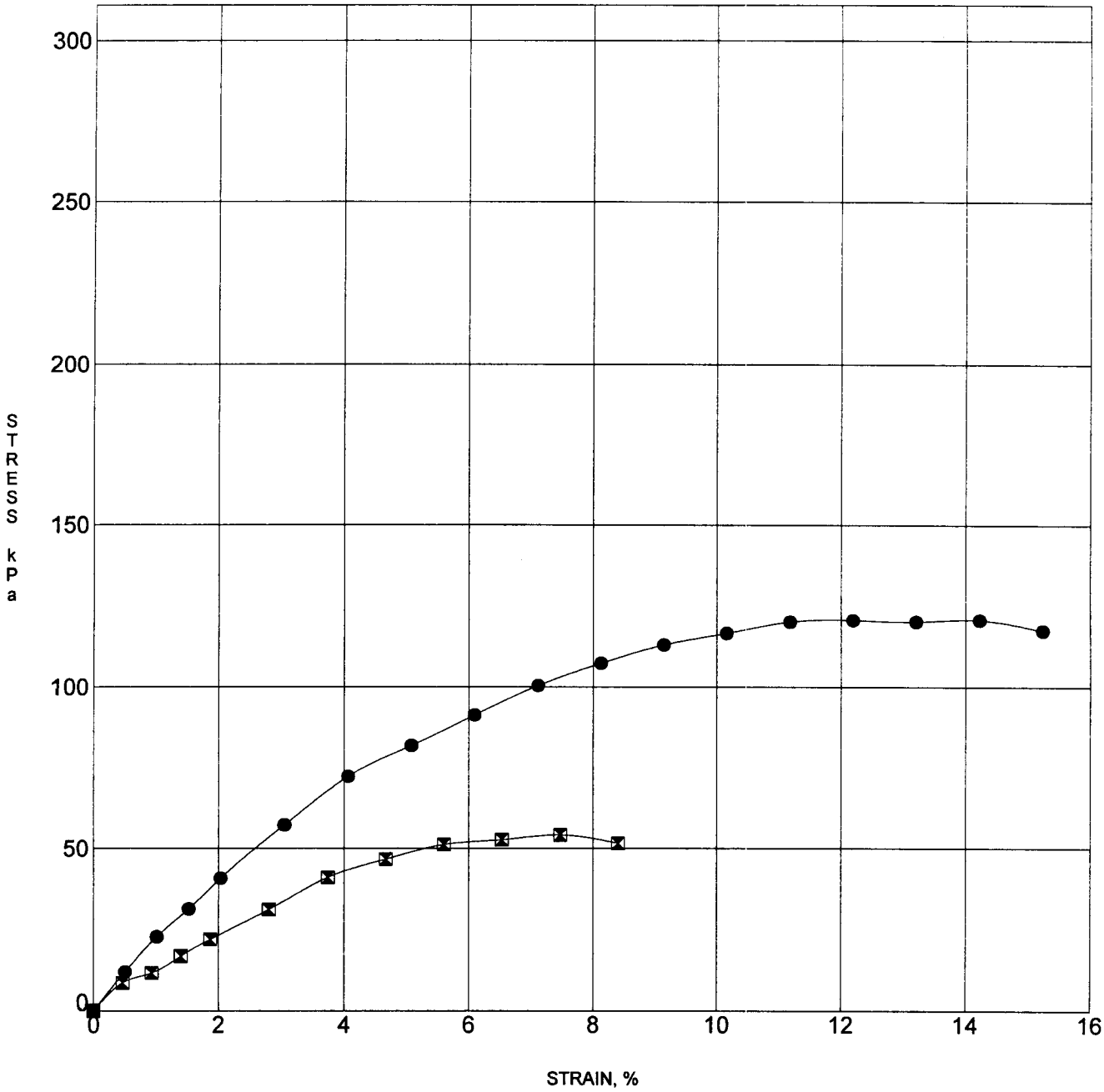
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-960



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-365	1.5	SILT (ML)	121	14.2	32
⊠	RB-365	7.6	SILT (ML)	54	15.4	28

KLEINFELDER

PROJECT NO. 35-8163-05

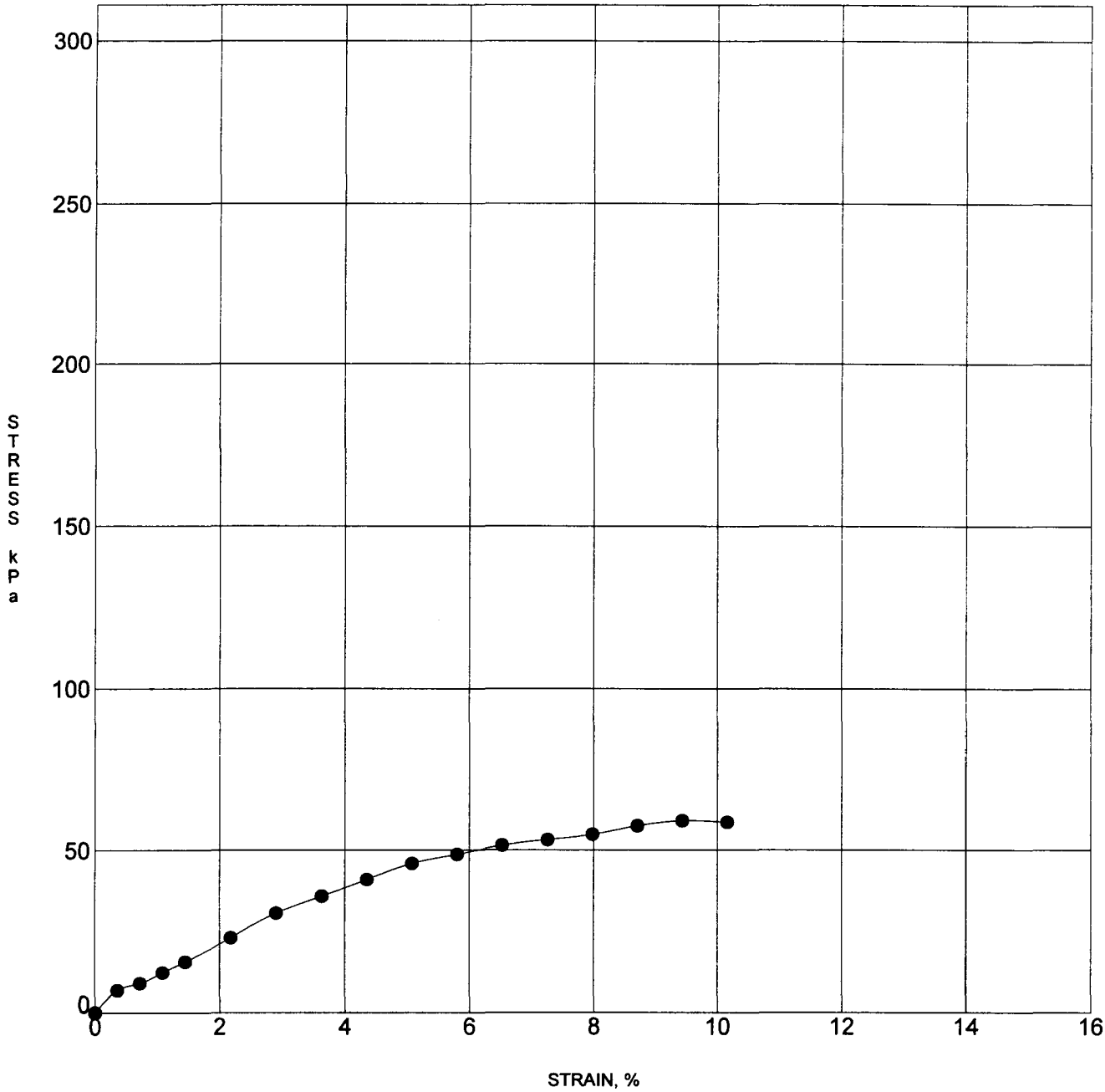
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-961



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-366	1.5	Fat CLAY (CH)	59	13.4	38

KLEINFELDER

PROJECT NO. 35-8163-05

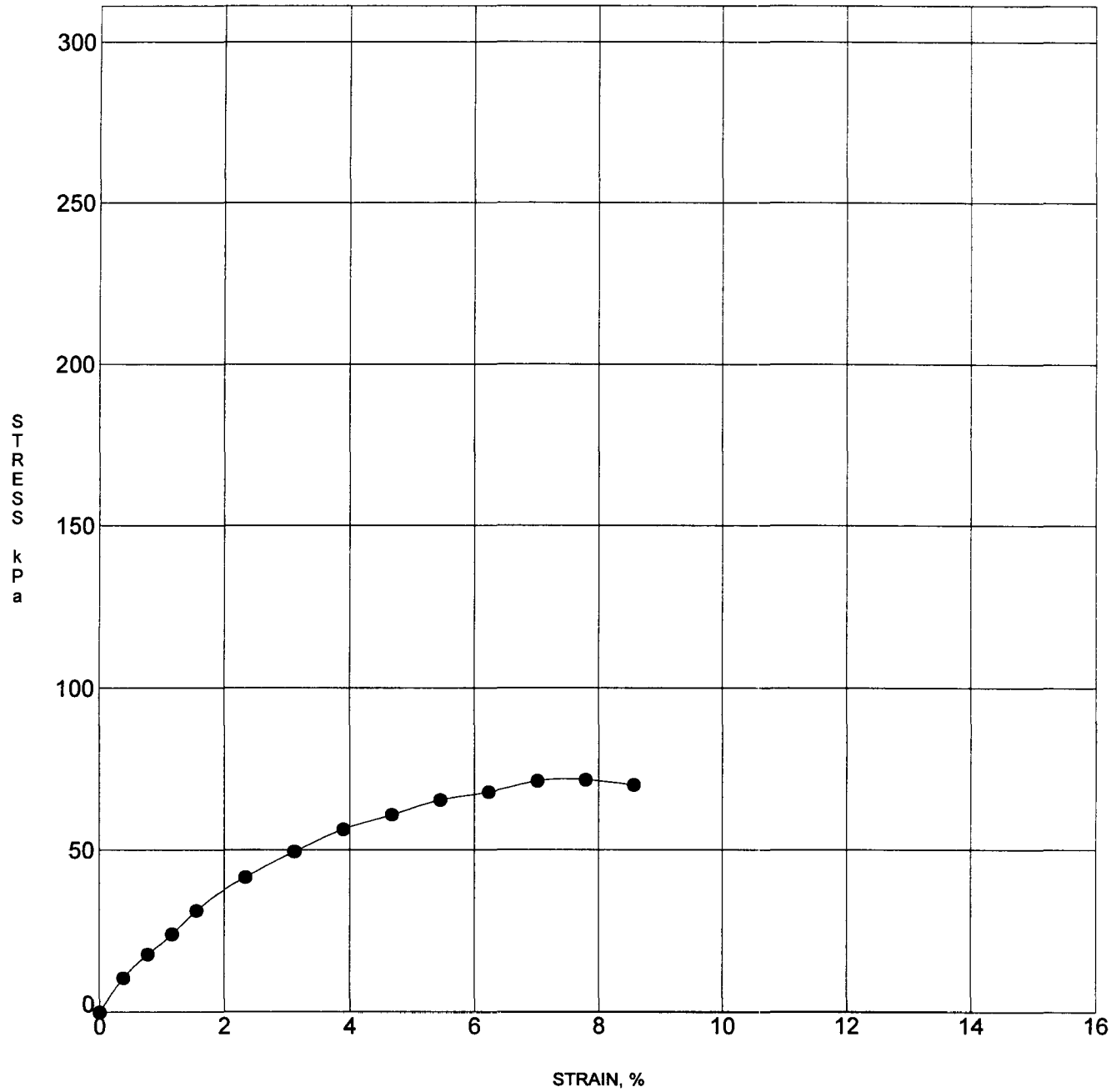
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-962



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-367	10.4	SILT (ML)	72	15.2	29

KLEINFELDER

Legacy Parkway - Preferred Alternative

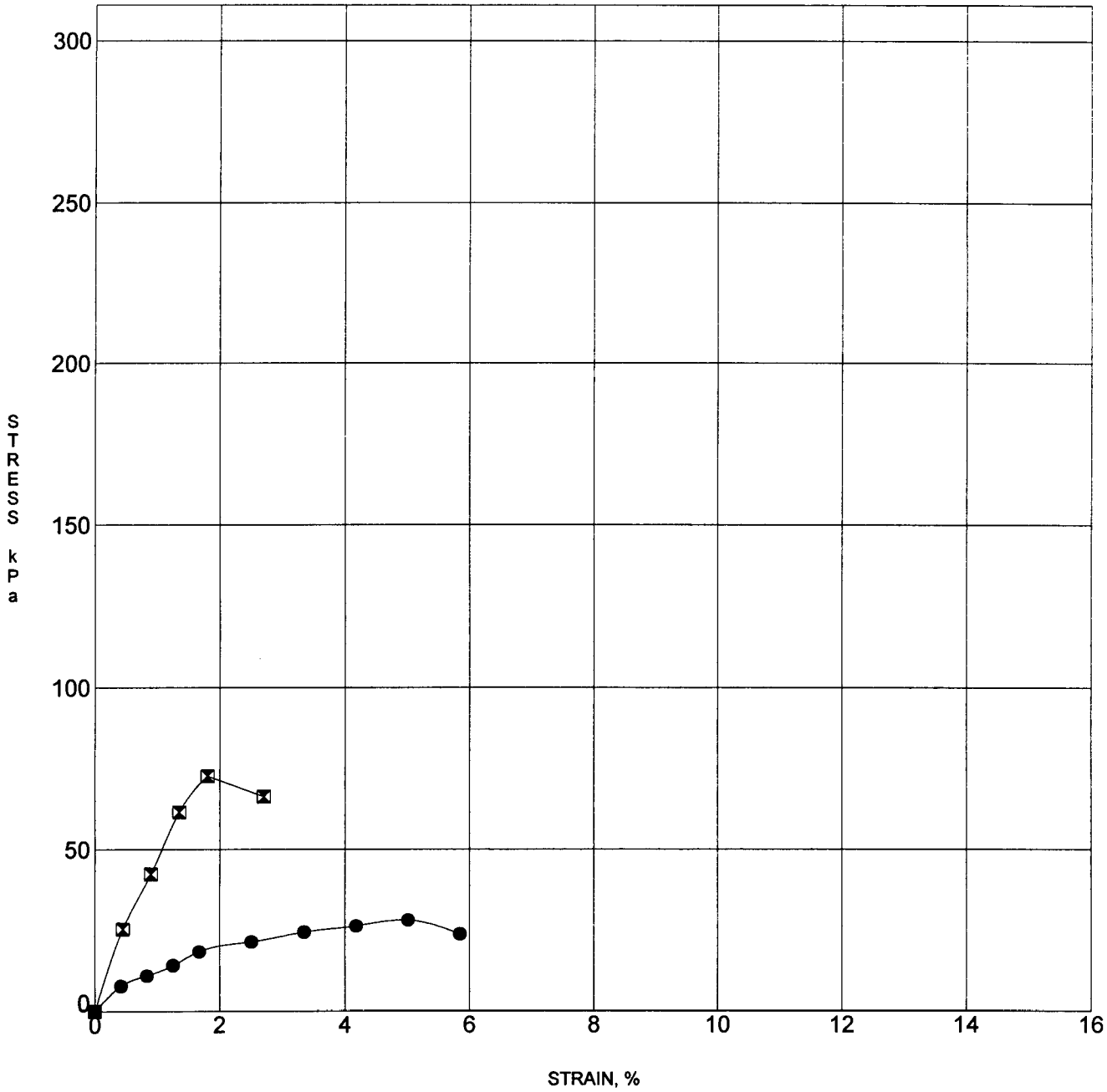
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-963

PROJECT NO. 35-8163-05



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-368	4.6	Lean CLAY (CL)	28	13.3	38
⊠	RB-368	16.8	SILT with sand (ML)	73	17.2	24

KLEINFELDER

PROJECT NO. 35-8163-05

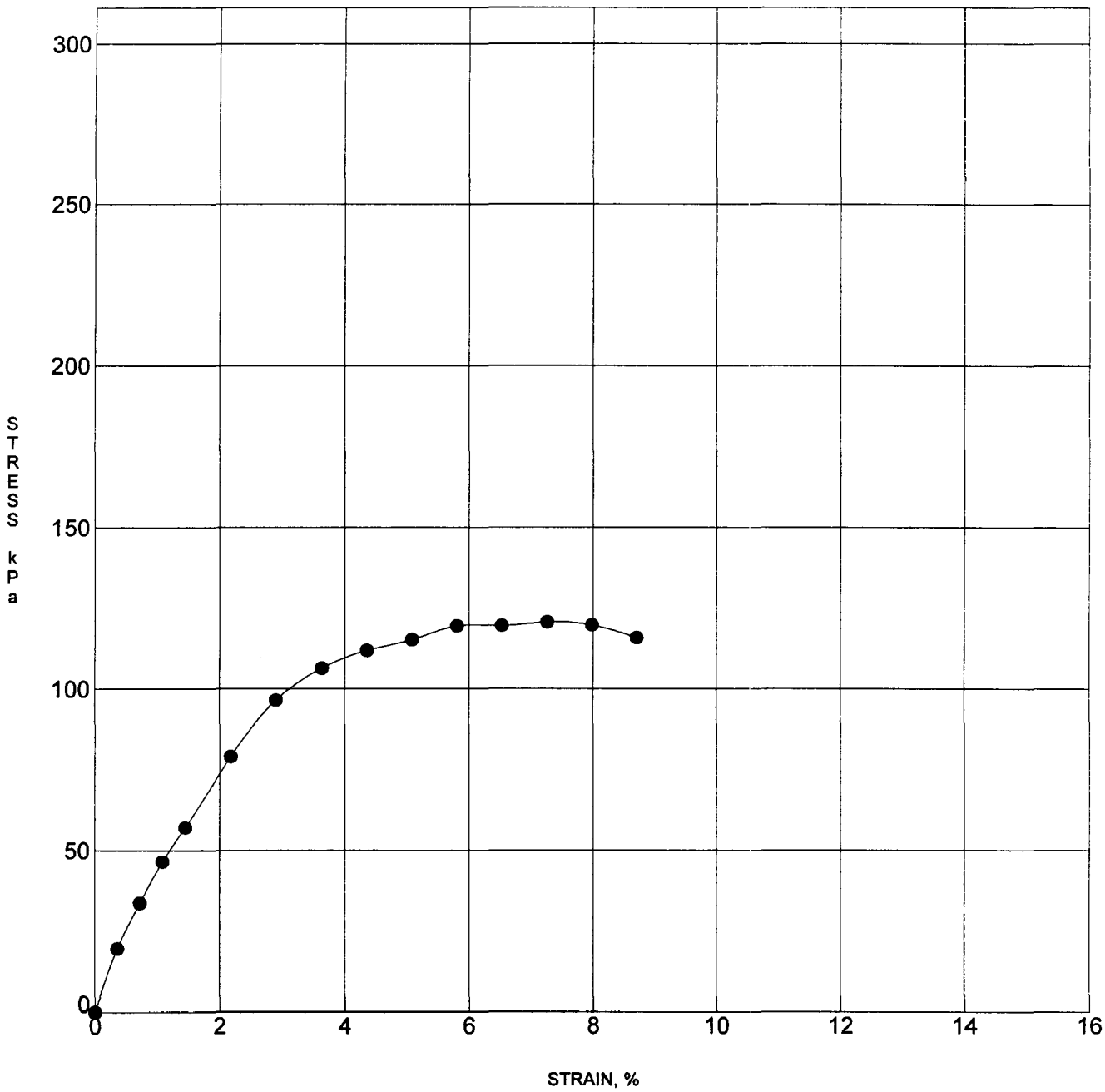
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-964



	Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	RB-369	13.7	Lean CLAY (CL)	121	15.3	28

KLEINFELDER

PROJECT NO. 35-8163-05

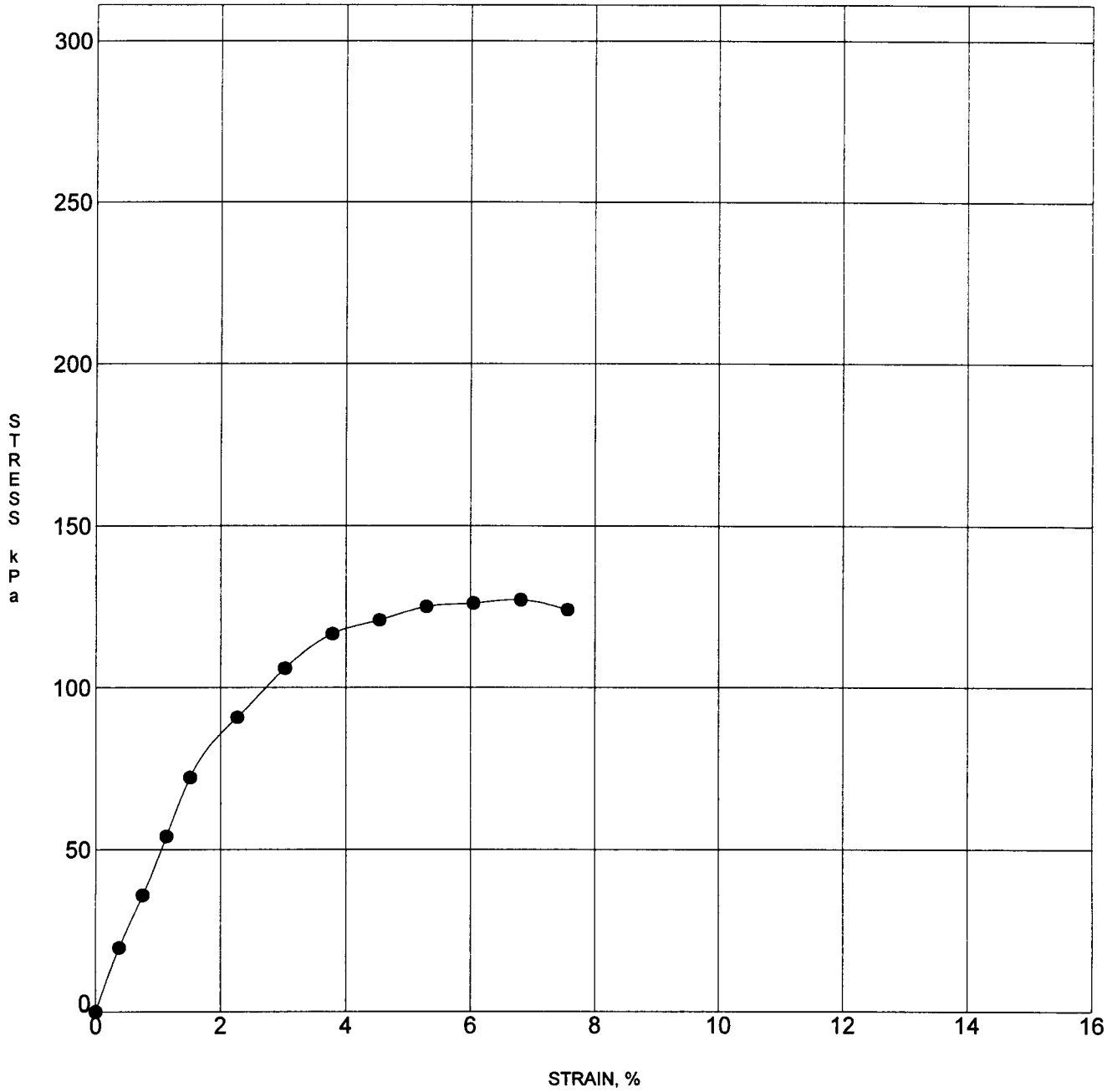
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-965



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-370	18.3	SILT (ML)	127	12.7	43

KLEINFELDER

PROJECT NO. 35-8163-05

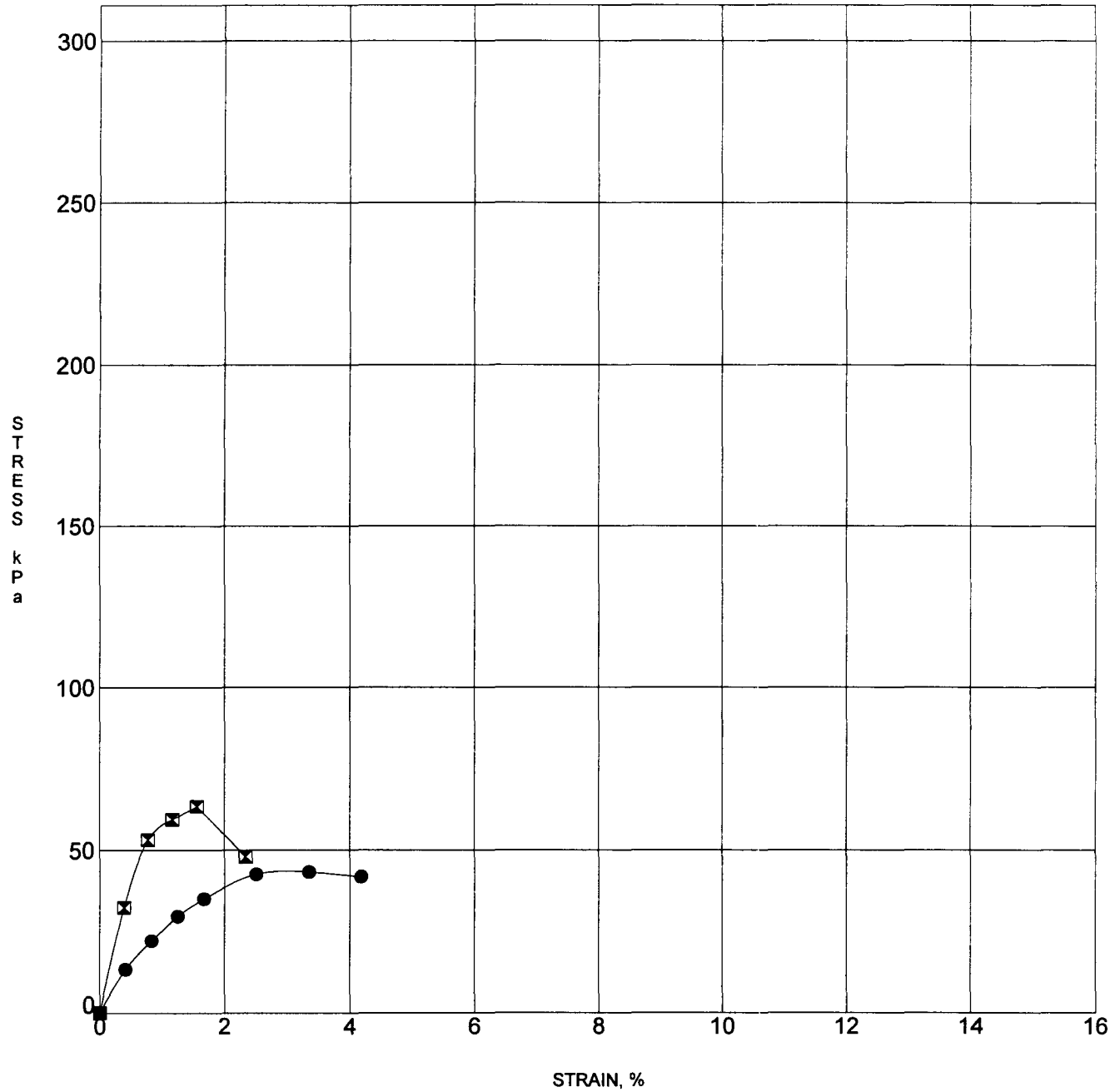
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-966



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-371	3.0	Lean CLAY (CL)	43	14.3	34
⊠	RB-371	19.8	Lean CLAY (CL)	63	18.5	17

KLEINFELDER

PROJECT NO. 35-8163-05

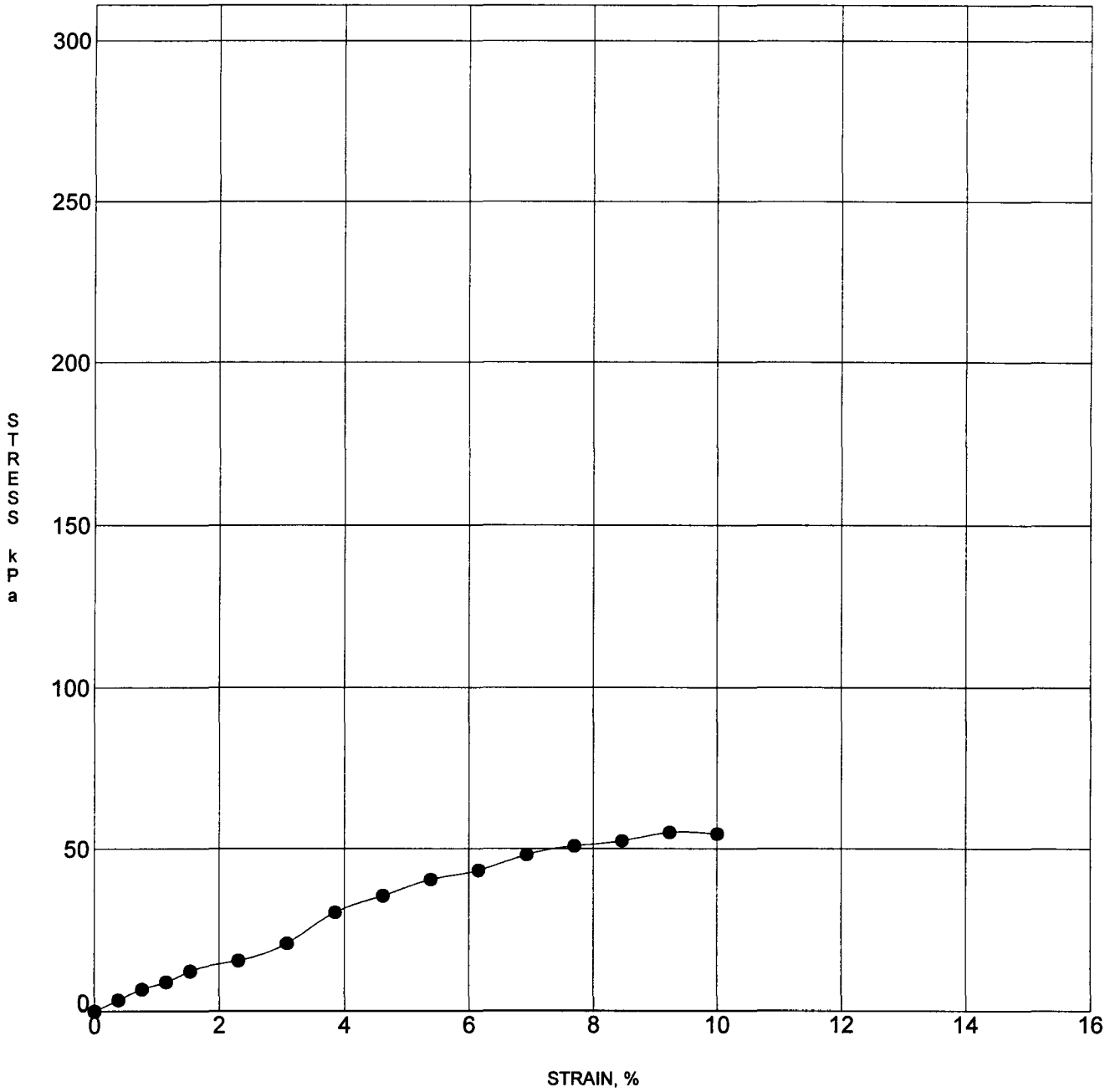
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-967



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-372 7.6		SILT (ML)	55	15.7	30

KLEINFELDER

PROJECT NO. 35-8163-05

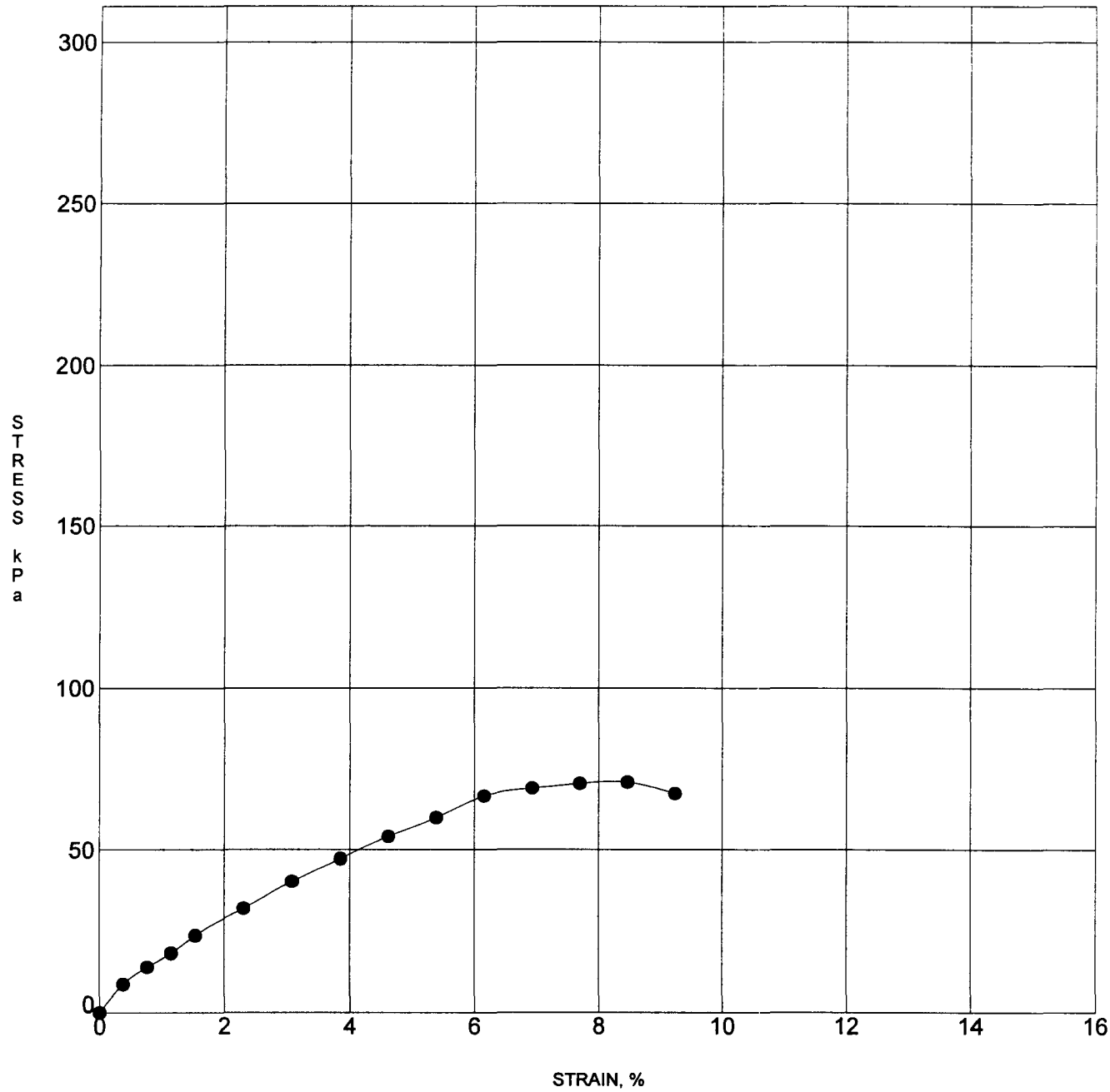
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-968



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-373	10.7	Lean CLAY (CL)	71	16.6	25

KLEINFELDER

Legacy Parkway - Preferred Alternative

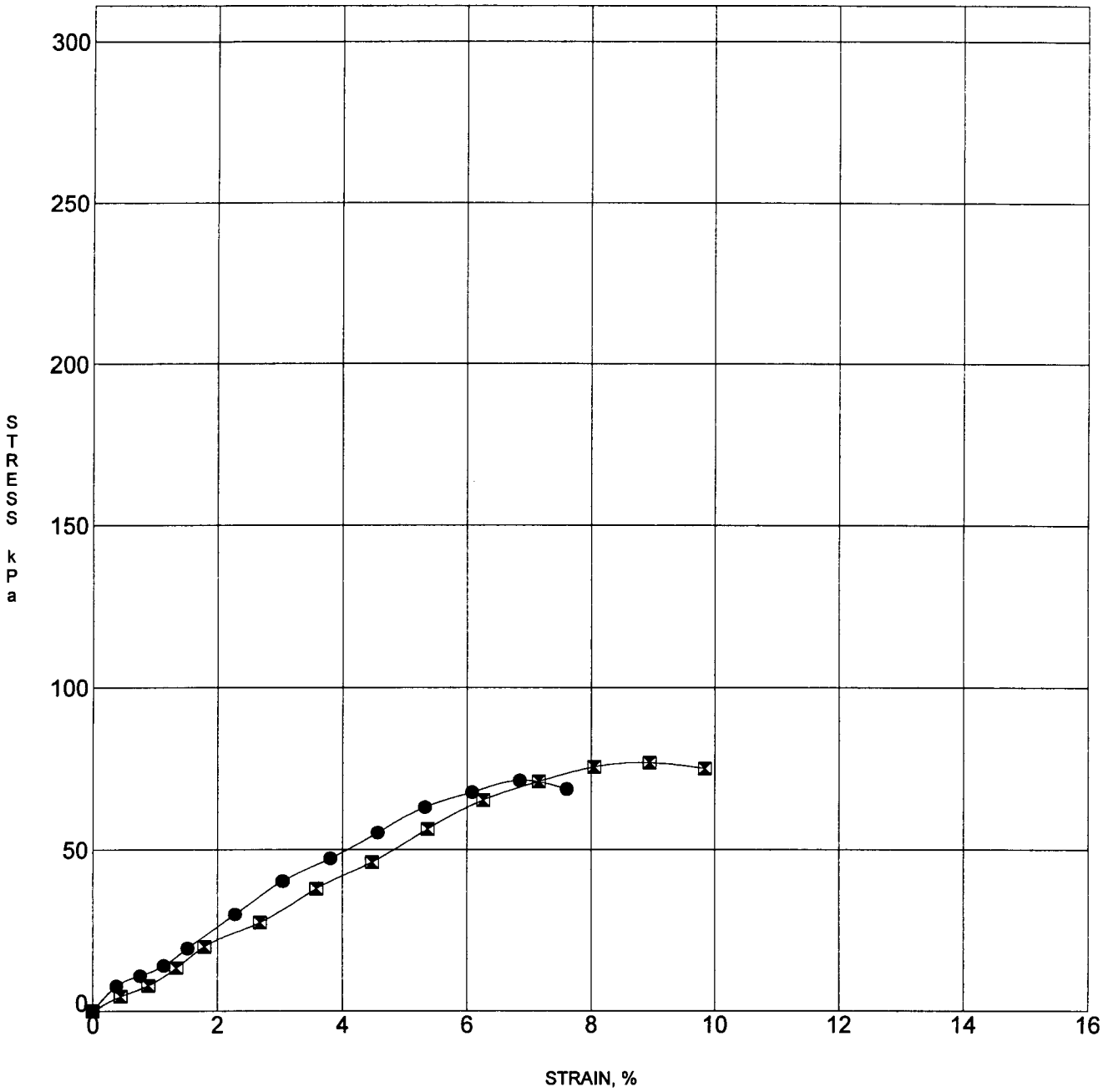
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-969

PROJECT NO. 35-8163-05



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-374	6.1	Lean CLAY (CL)	71	15.7	27
⊠	RB-374	9.1	Lean CLAY (CL)	77	14.2	25

KLEINFELDER

PROJECT NO. 35-8163-05

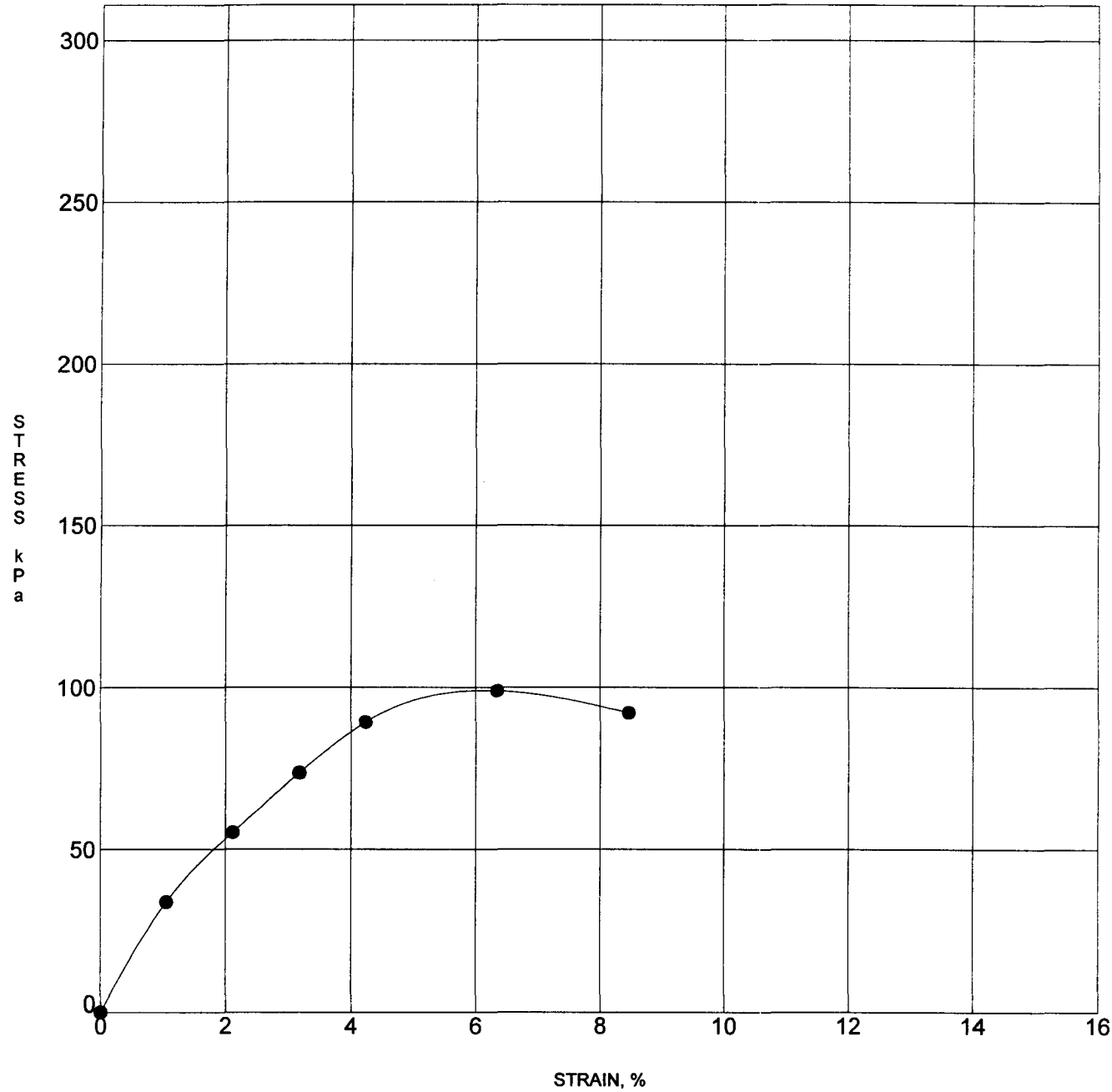
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-970



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-375	9.1	Sandy SILT (ML)	99	15.7	27

KLEINFELDER

Legacy Parkway - Preferred Alternative

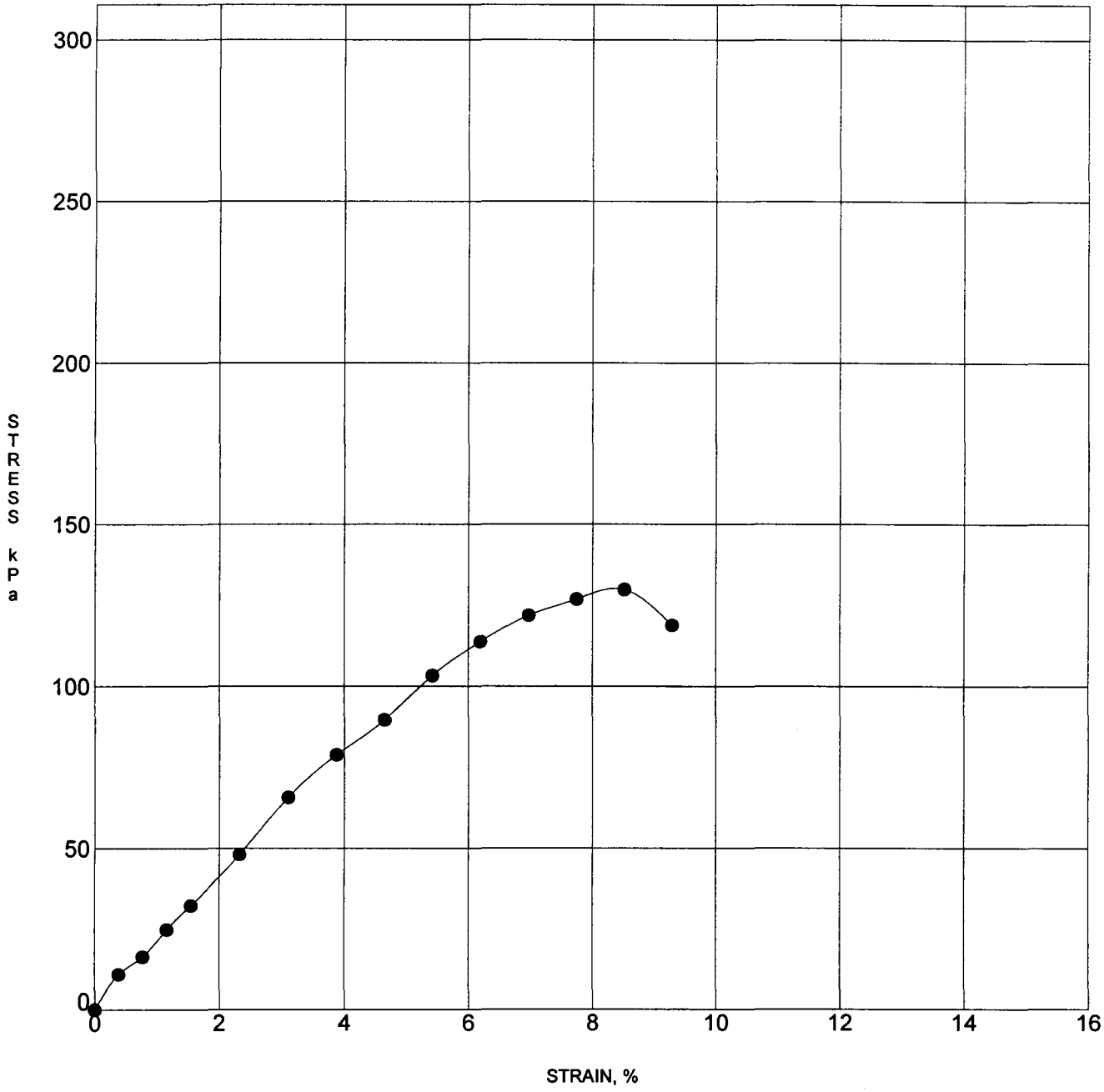
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-971

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-376	6.1	Lean CLAY (CL)	130	15.7	27

KLEINFELDER

PROJECT NO. 35-8163-05

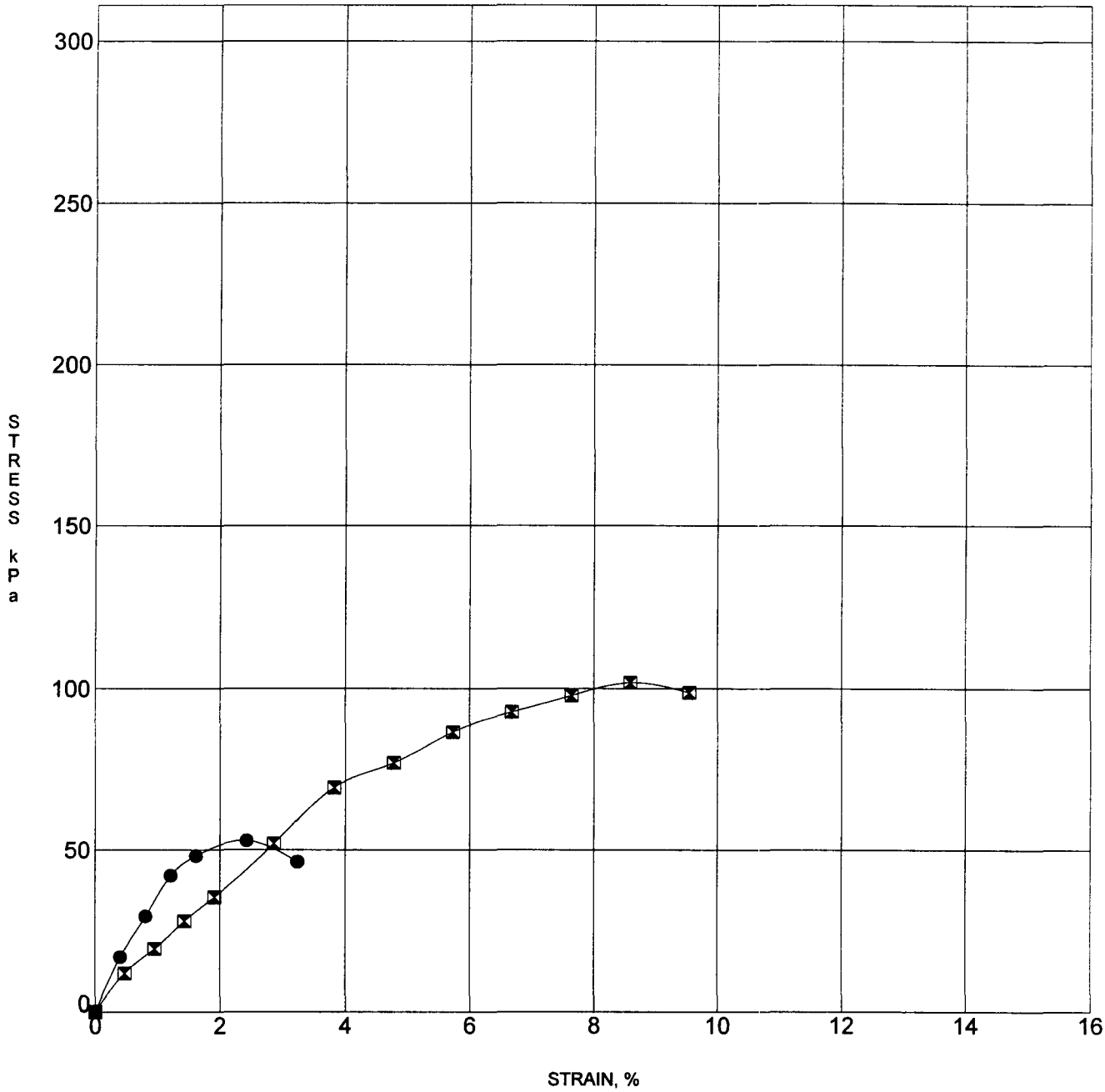
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-972



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-377	6.1	Fat CLAY (CH)	53	11.3	51
⊠	RB-377	16.8	Lean CLAY (CL)	102	14.1	31

KLEINFELDER

PROJECT NO. 35-8163-05

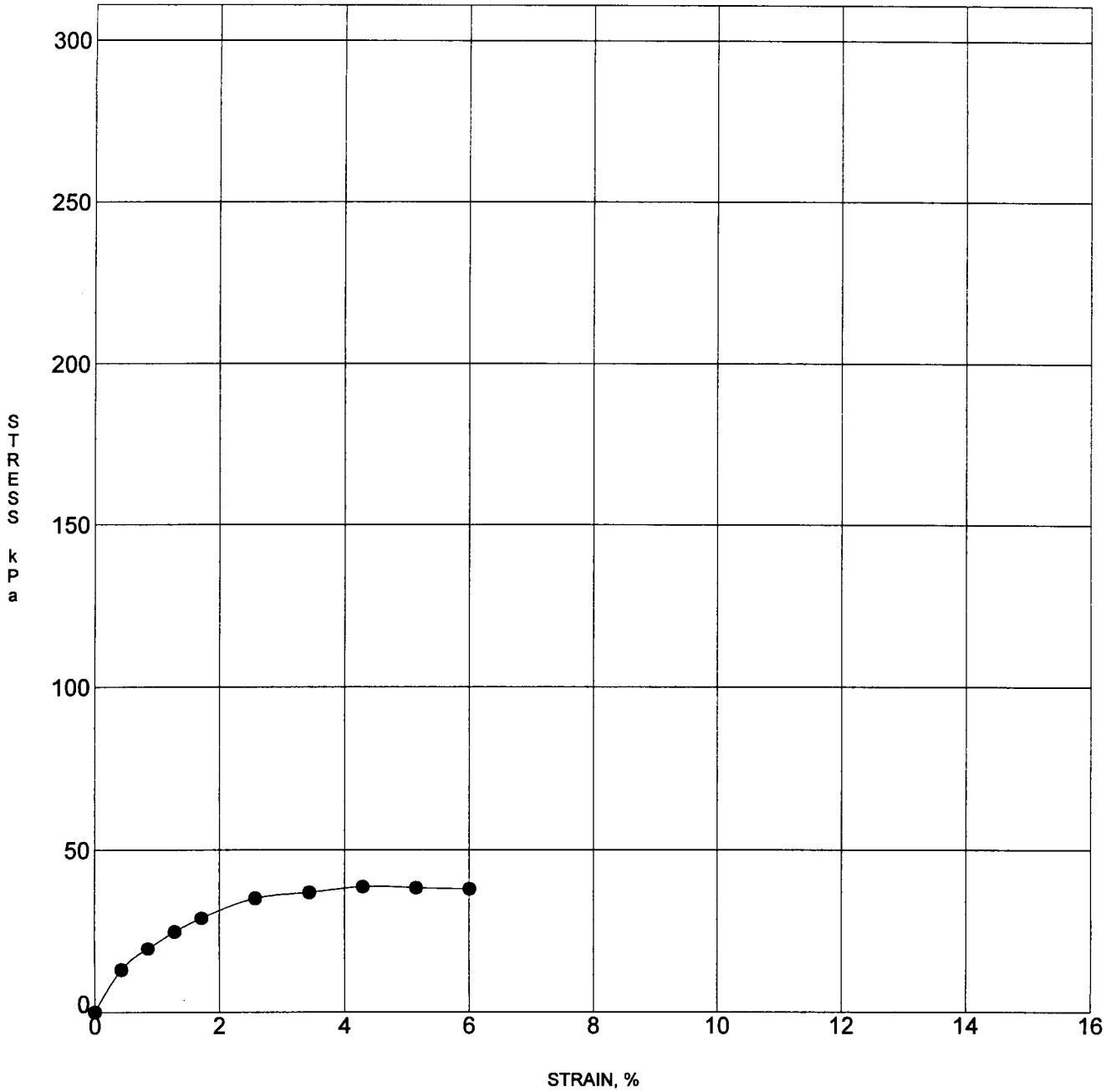
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-973



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-378	6.1	Fat CLAY (CH)	39	11.5	50

KLEINFELDER

PROJECT NO. 35-8163-05

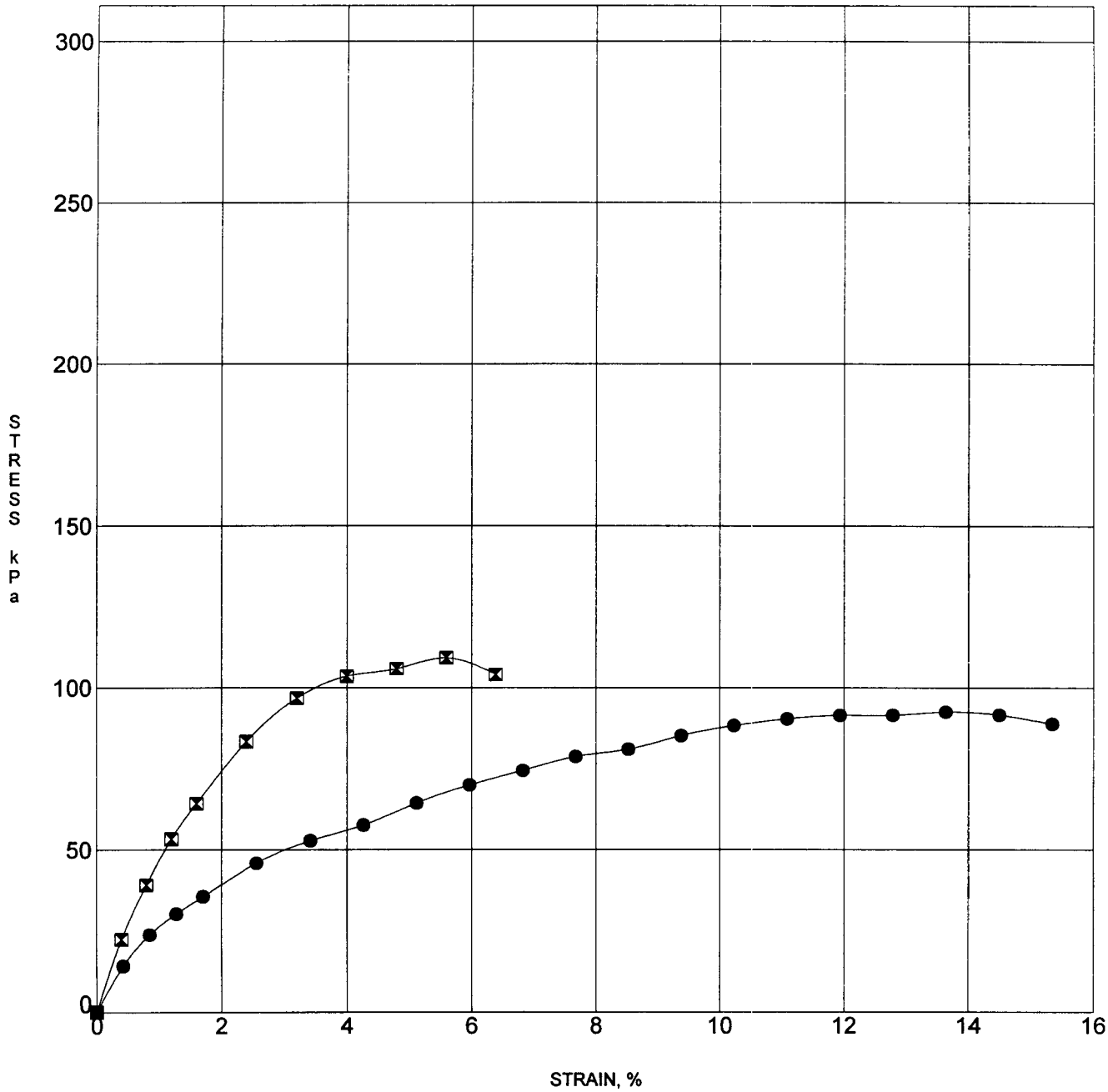
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-974



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-379	4.6	Lean CLAY (CL)	92	15.6	26
⊠	RB-379	10.7	Clayey SAND (SC)	109	14.5	35

KLEINFELDER

PROJECT NO. 35-8163-05

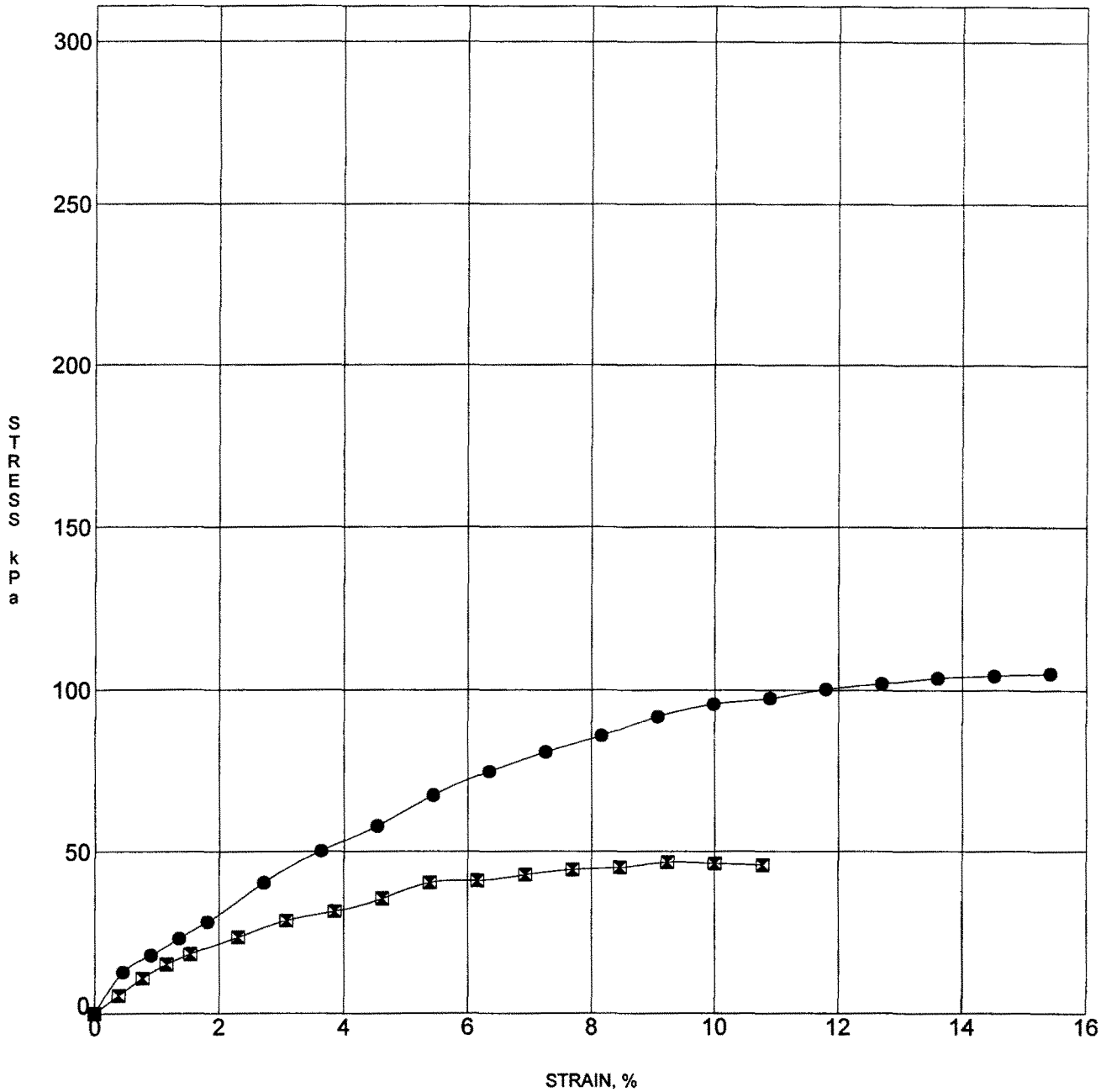
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-975



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-380	3.0	Lean CLAY (CL)	105	14.9	27
⊠	RB-380	9.1	Fat CLAY (CH)	47	11.4	50

KLEINFELDER

PROJECT NO. 35-8163-05

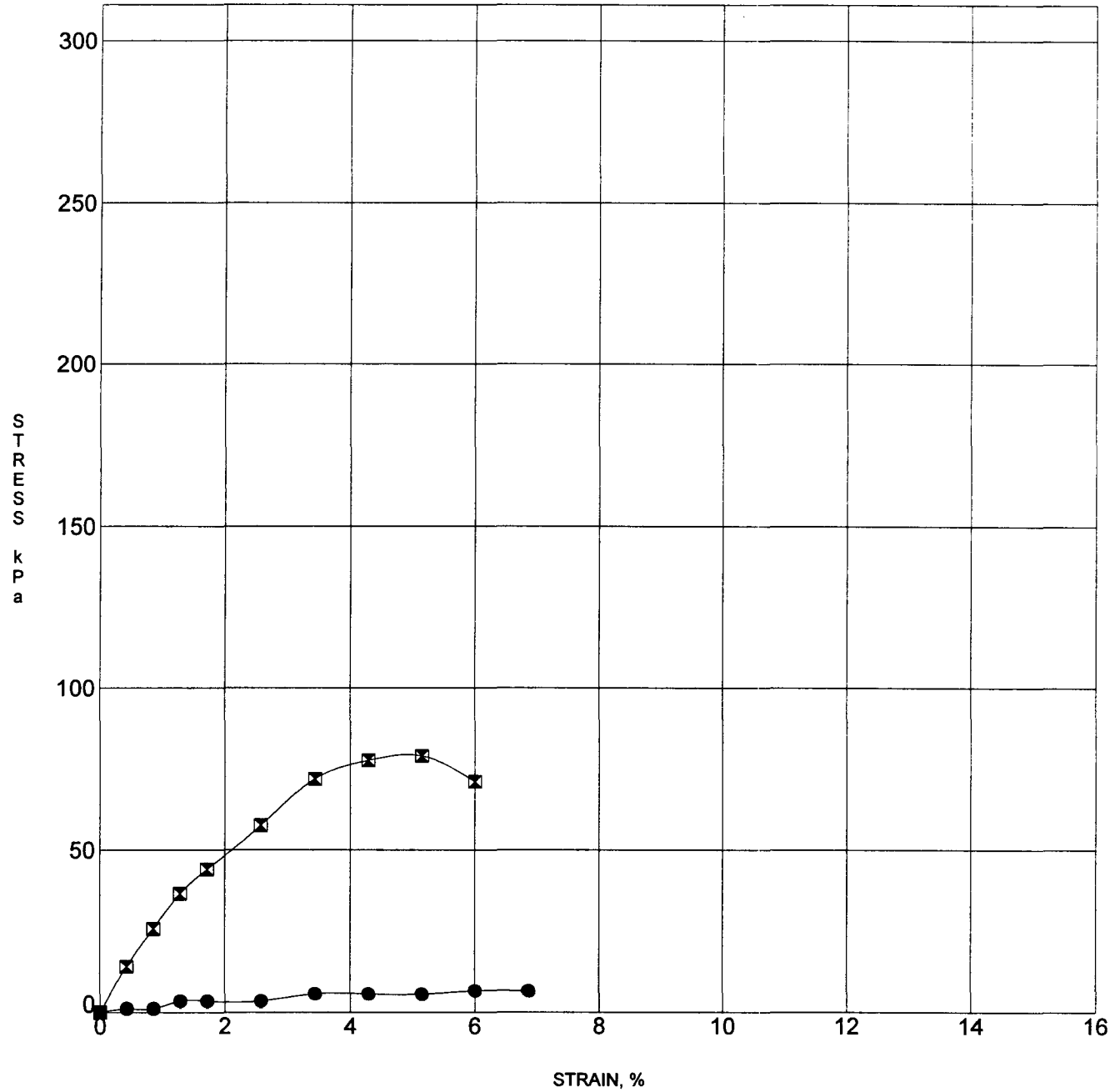
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-976



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-381	6.1	Fat CLAY (CH)	7	13.5	42
⊠	RB-381	15.2	Sandy SILT (ML)	79	19.6	22

KLEINFELDER

Legacy Parkway - Preferred Alternative

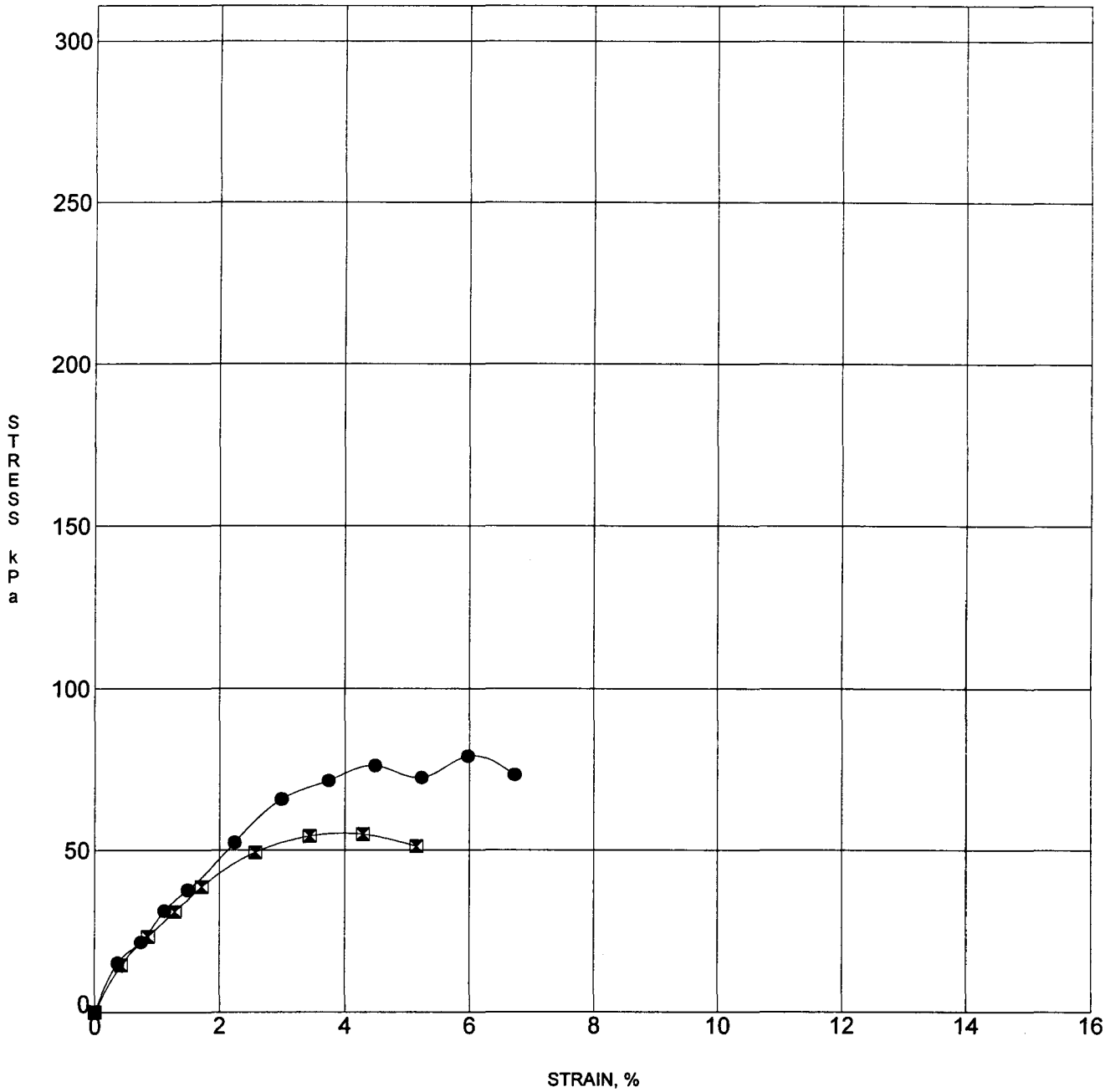
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-977

PROJECT NO. 35-8163-05



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-382	1.5	Lean CLAY (CL)	79	15.1	29
⊠	RB-382	10.7	Lean CLAY (CL)	55	13.0	41

KLEINFELDER

PROJECT NO. 35-8163-05

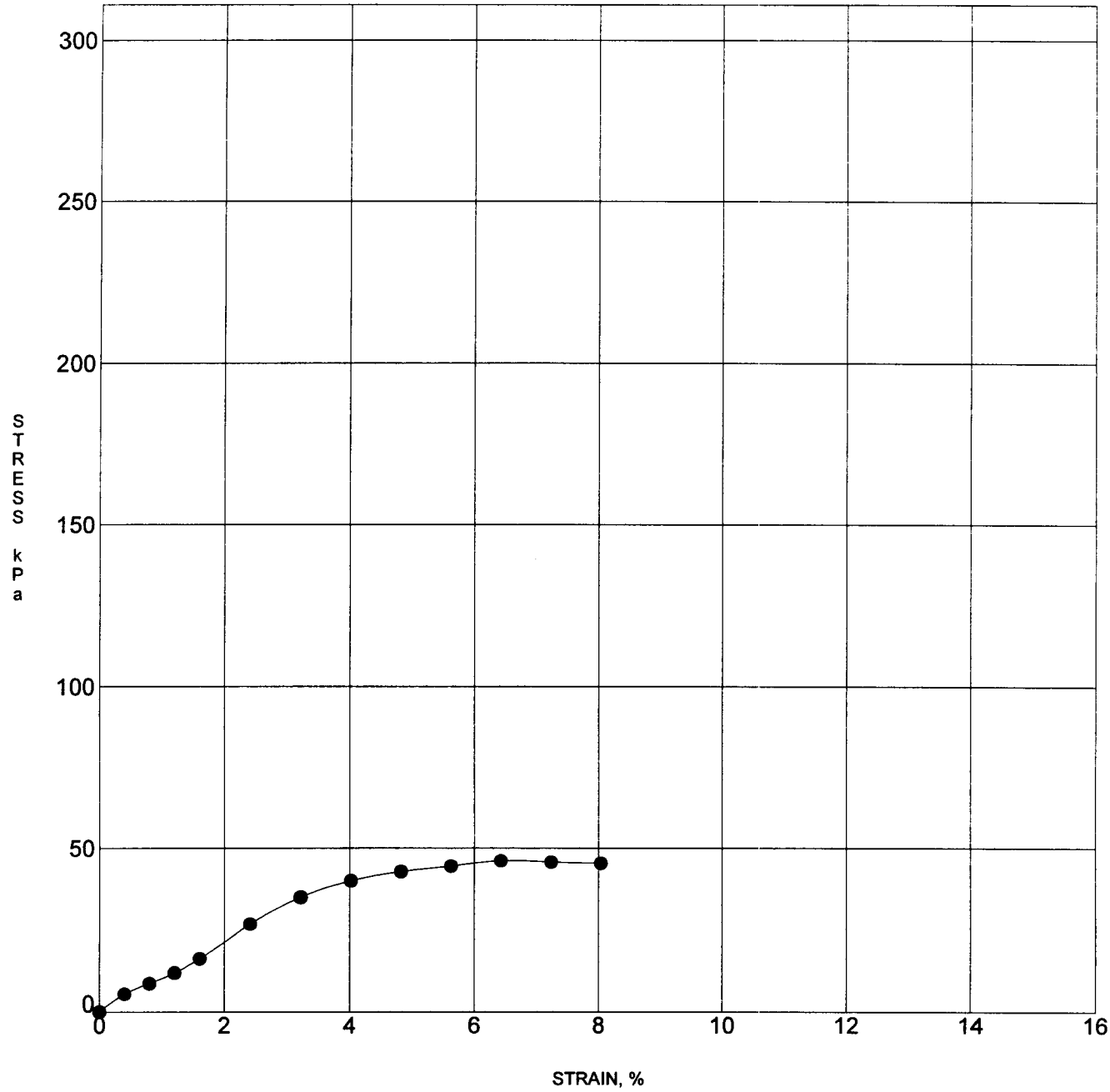
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-978



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-383	6.1	Fat CLAY (CH)	46	11.5	47

KLEINFELDER

Legacy Parkway - Preferred Alternative

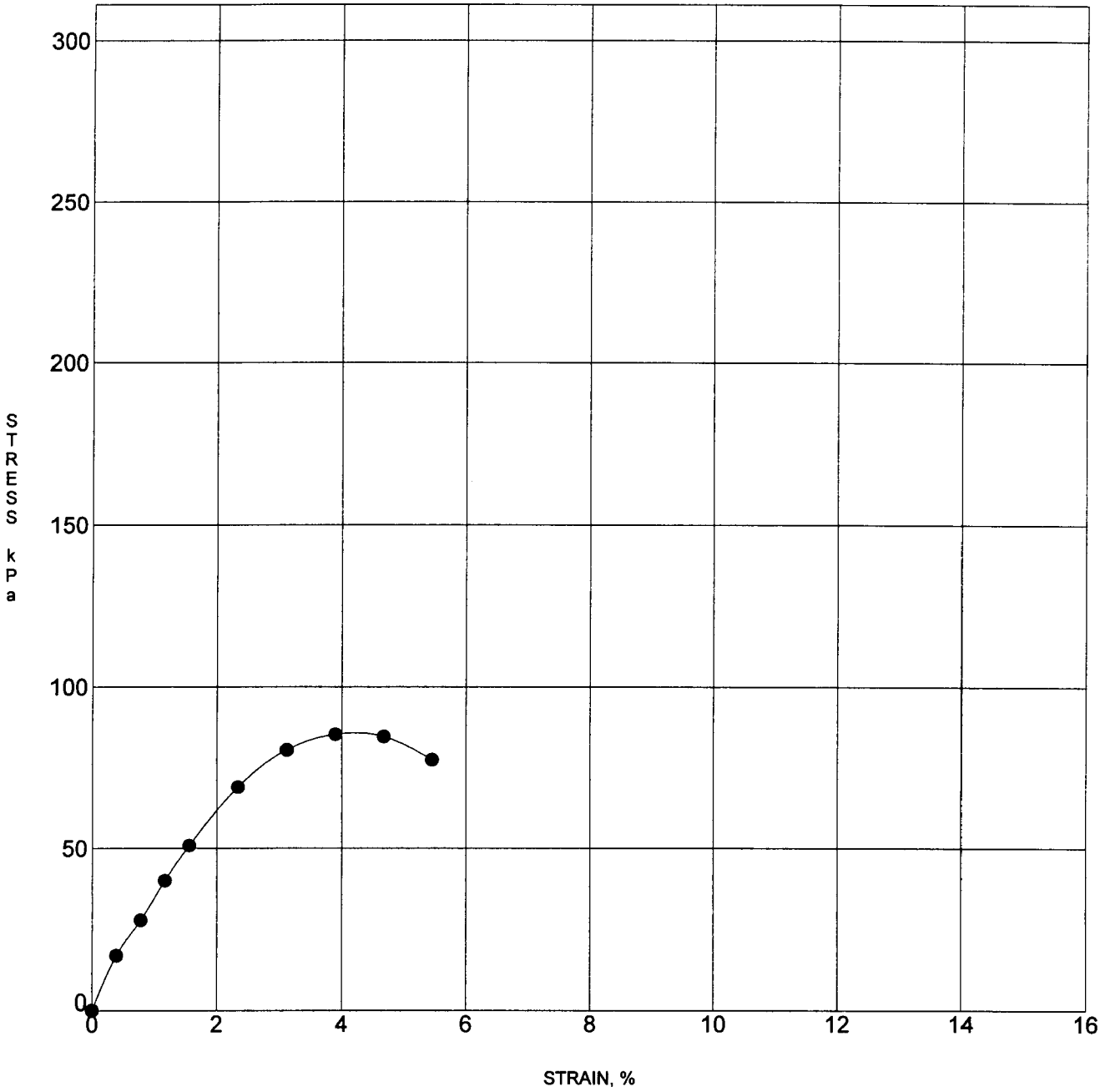
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-979

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-384 15.2		Lean CLAY (CL)	85	12.7	40

KLEINFELDER

PROJECT NO. 35-8163-05

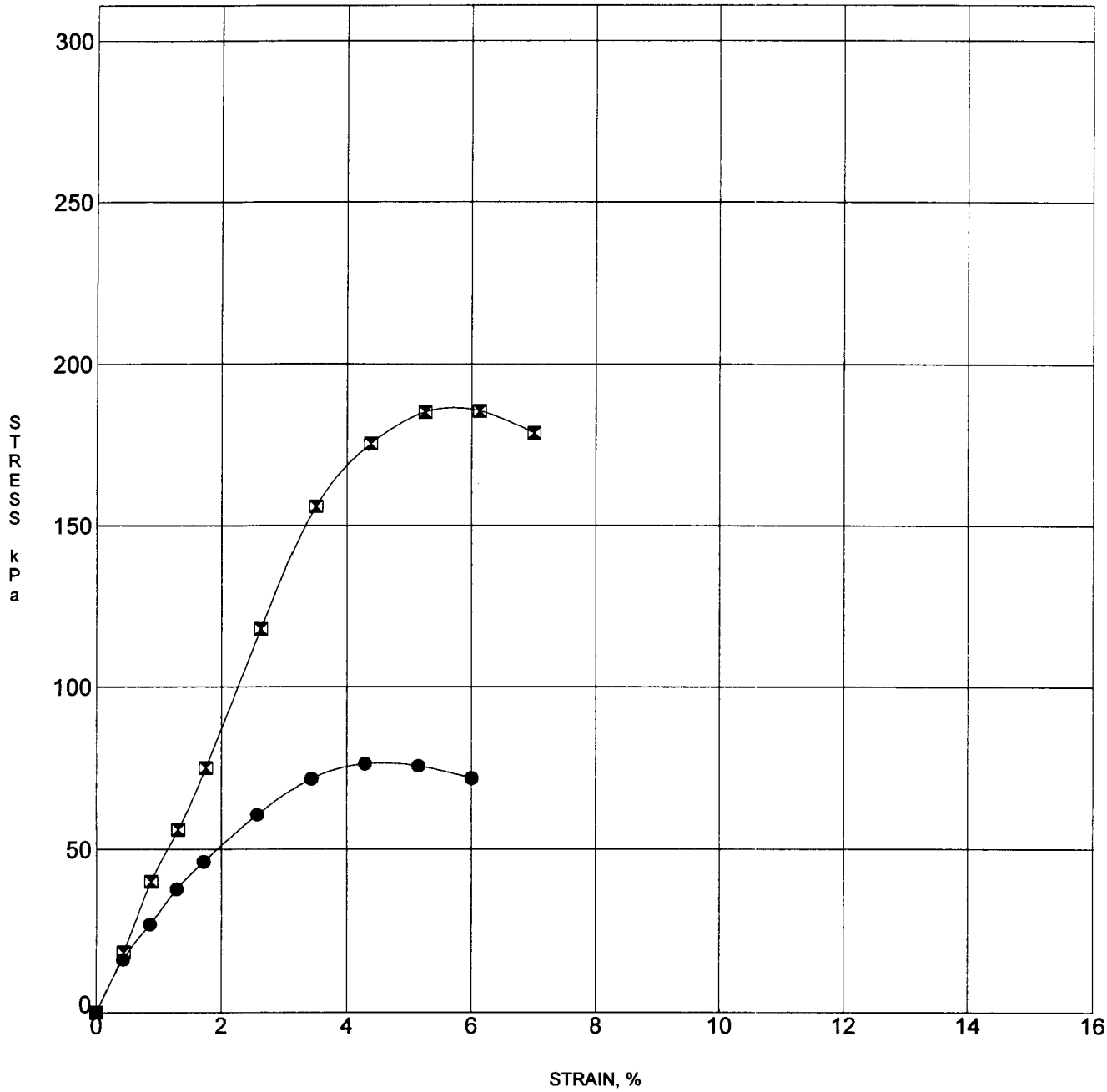
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-980



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-385	2.7	Lean CLAY (CL)	76	14.5	31
⊠	RB-385	21.3	Fat CLAY (CH)	186	13.4	39

KLEINFELDER

Legacy Parkway - Preferred Alternative

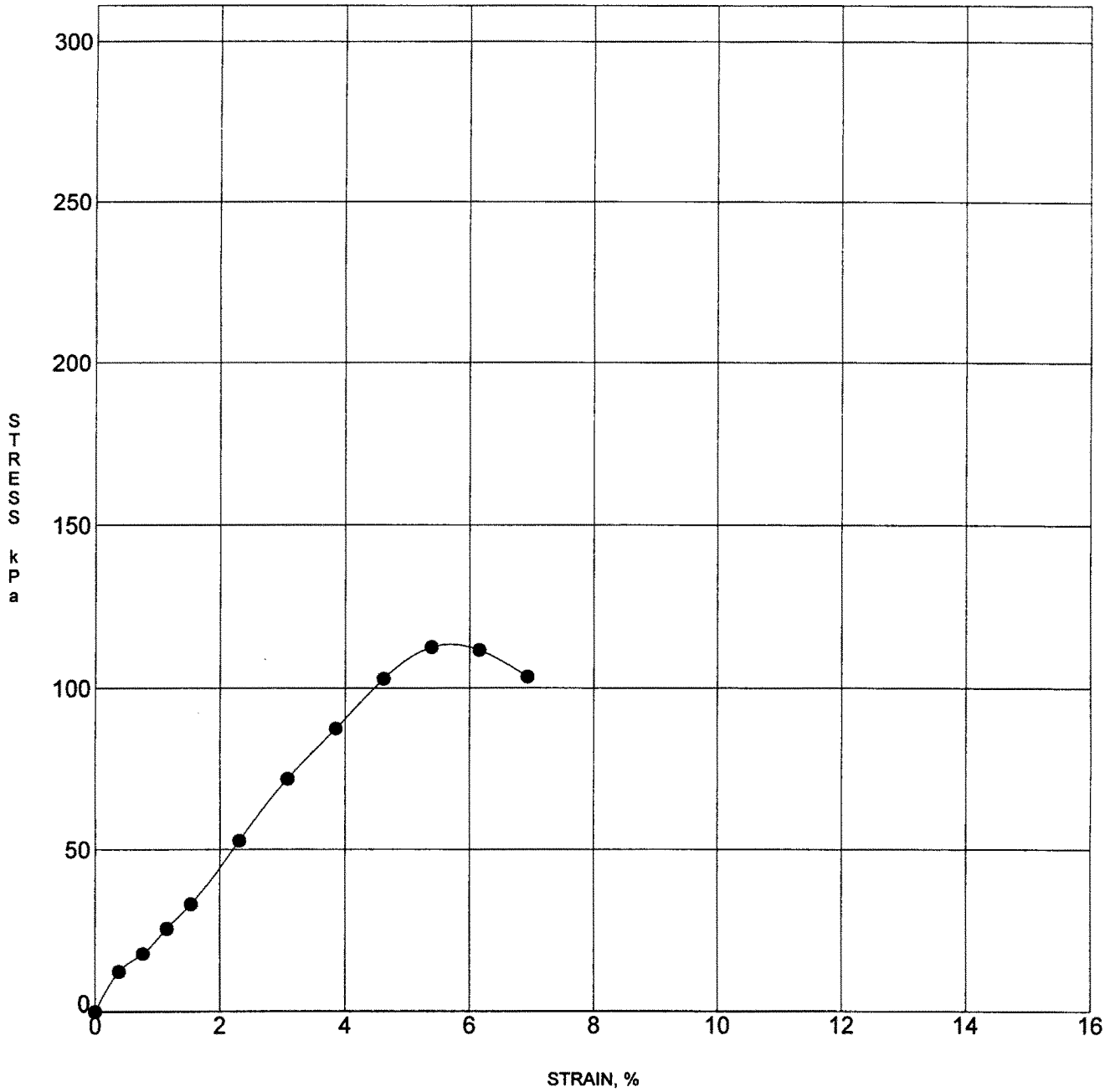
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-981

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-386	10.7	Lean CLAY (CL)	113	17.1	22

KLEINFELDER

PROJECT NO. 35-8163-05

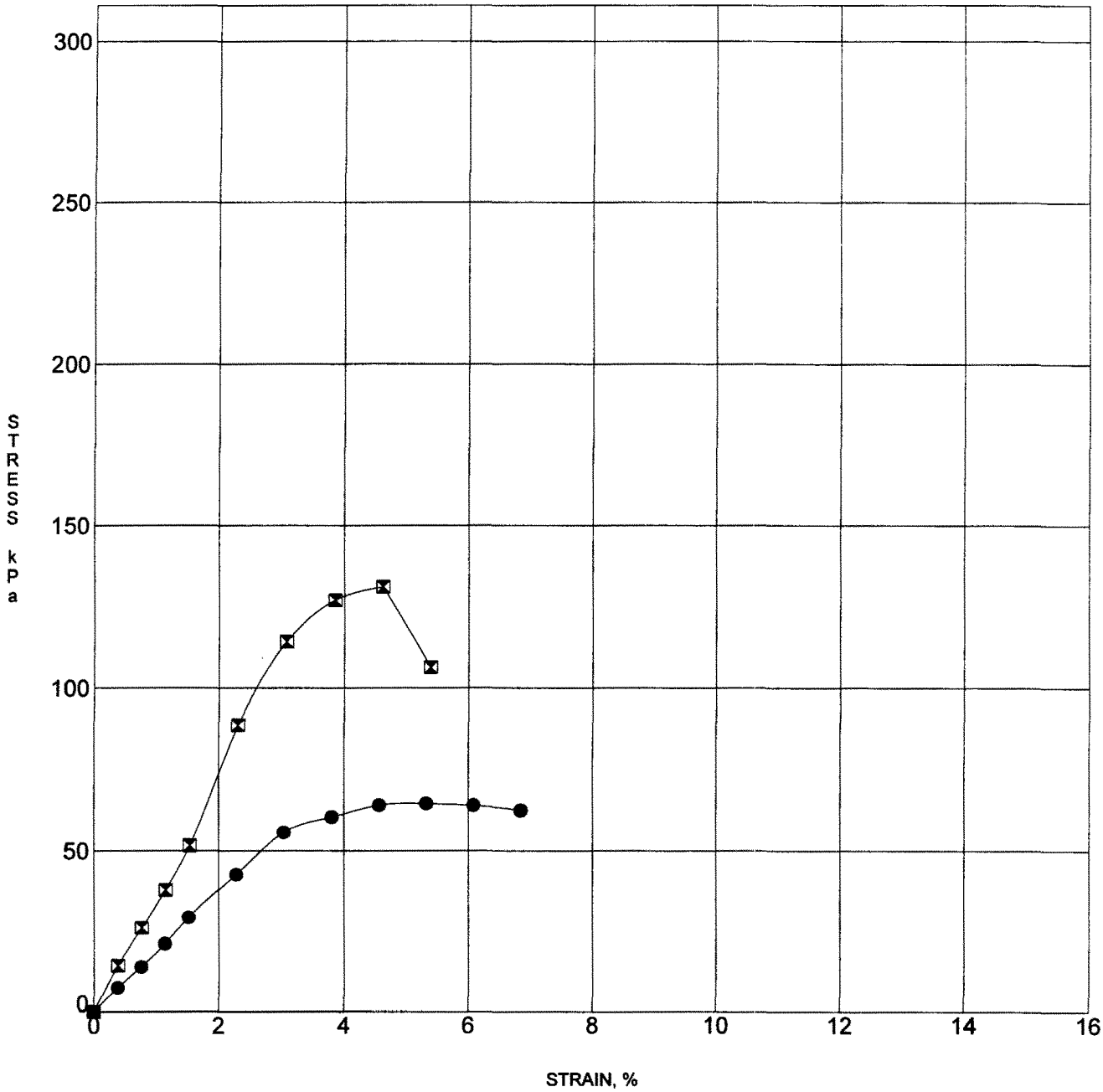
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-982



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-388	9.1	Lean CLAY (CL)	64	12.0	45
⊠	RB-388	22.9	Lean CLAY (CL)	131	16.0	26

KLEINFELDER

PROJECT NO. 35-8163-05

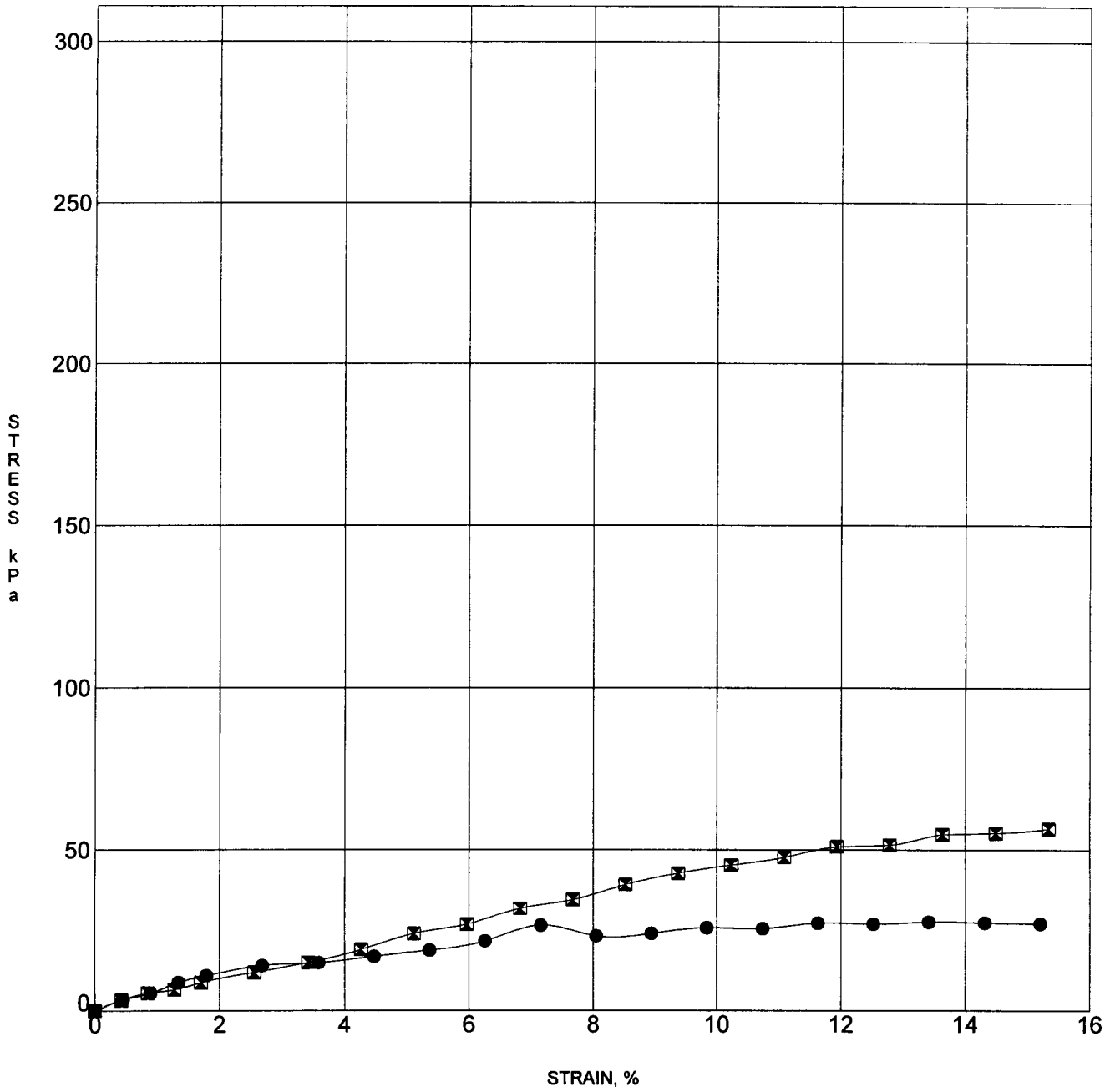
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-983



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-389	4.6	Lean CLAY (CL)	27	12.3	45
⊠	RB-389	7.6	Lean CLAY (CL)	56	15.4	29

KLEINFELDER

PROJECT NO. 35-8163-05

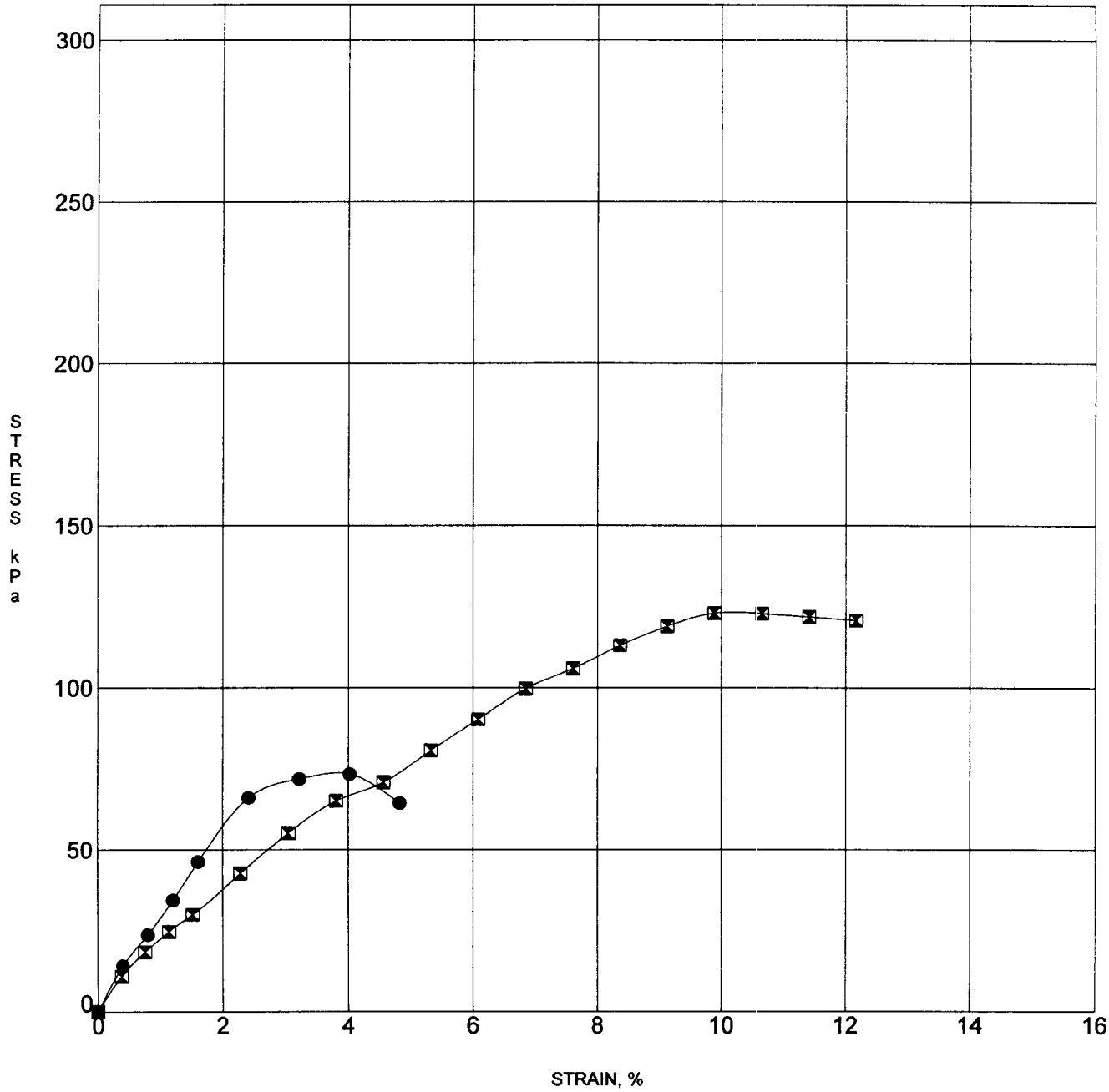
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-984



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-390	5.8	SILT (ML)	73	16.3	27
⊠	RB-390	8.8	Lean CLAY (CL)	123	15.5	29

KLEINFELDER

PROJECT NO. 35-8163-05

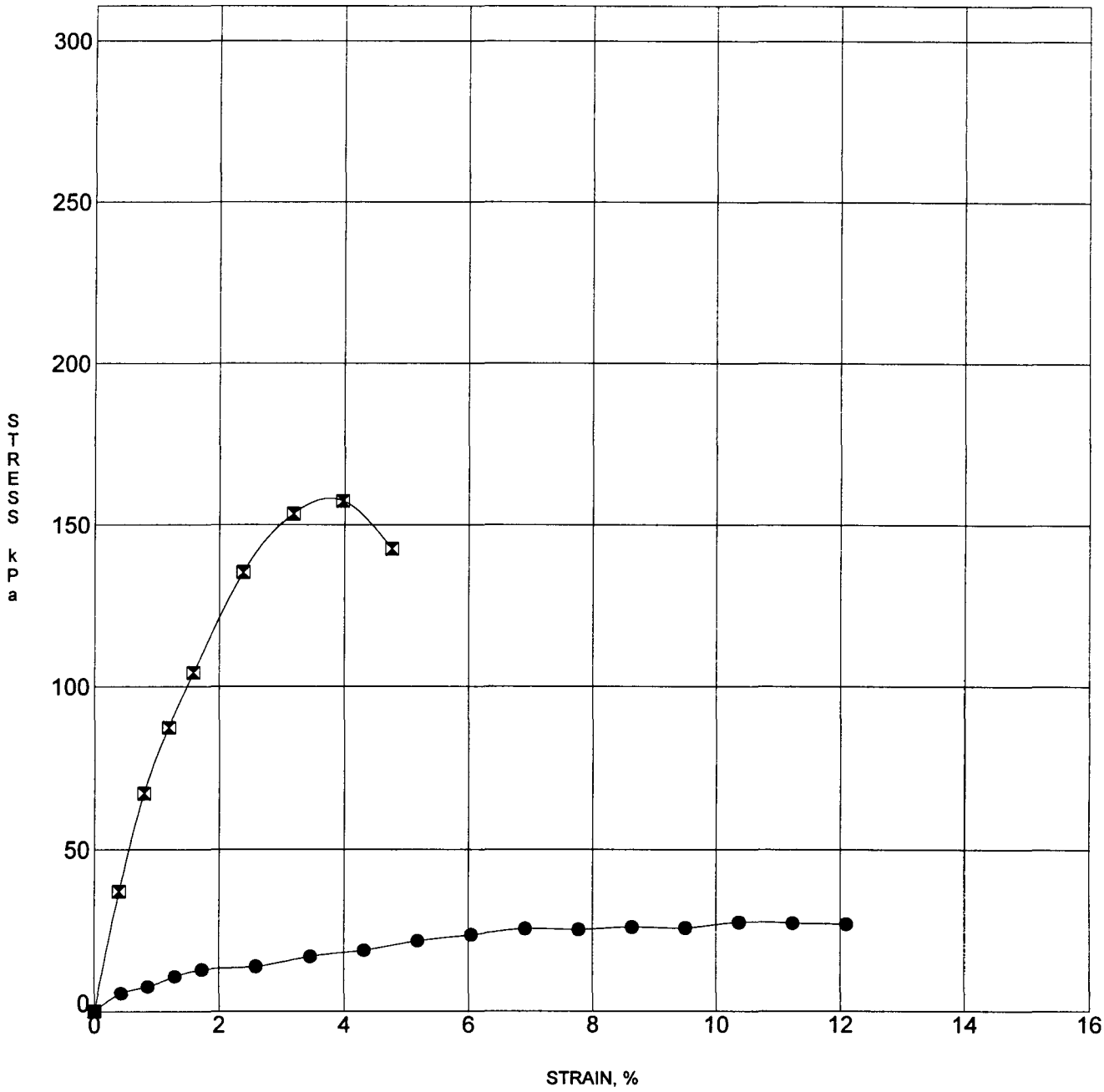
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-985



Specimen Identification			USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-392	6.1	Lean CLAY (CL)	27	11.3	51
⊠	RB-392	25.9	Lean CLAY (CL)	157	18.3	7

KLEINFELDER

PROJECT NO. 35-8163-05

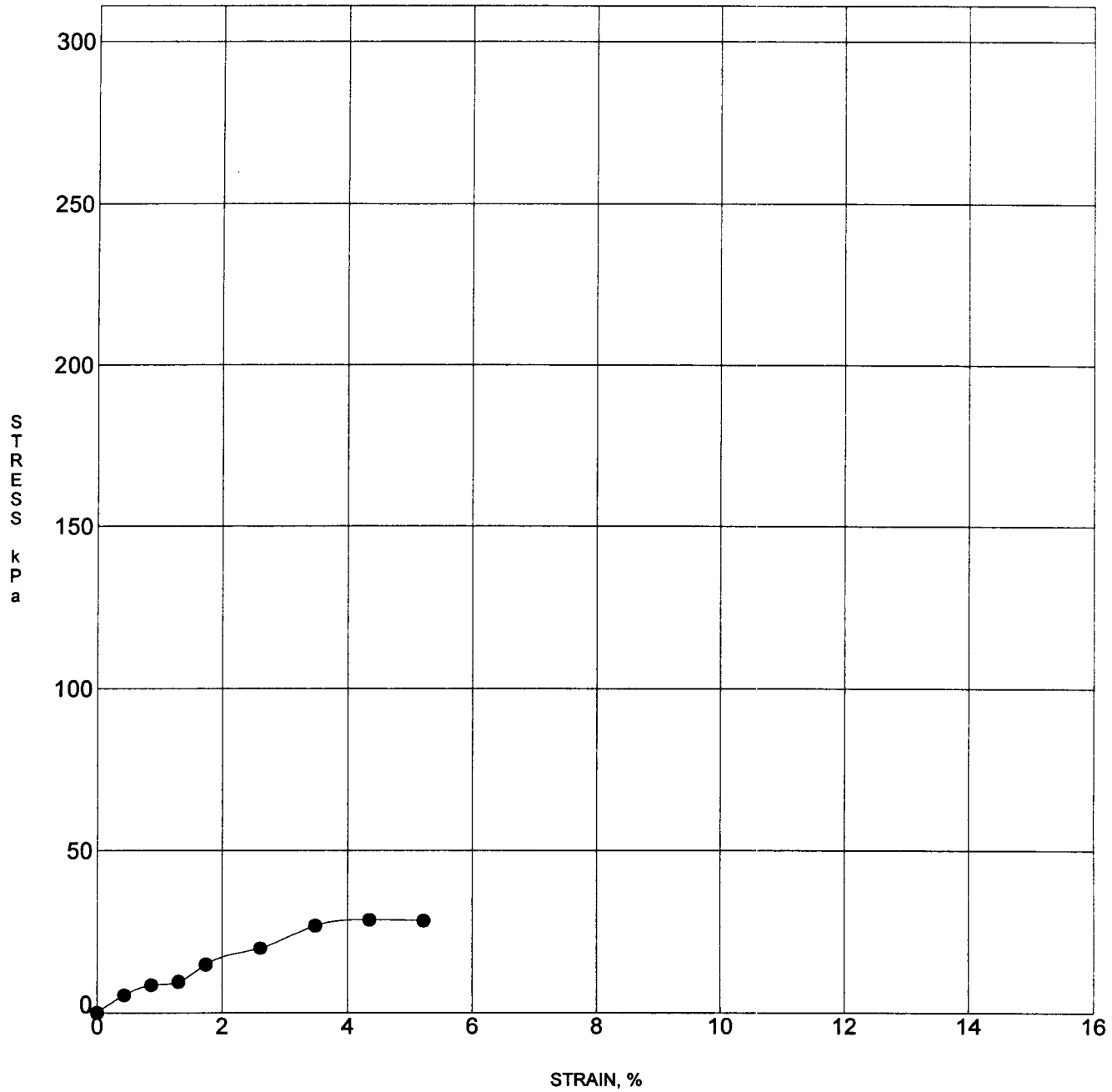
Legacy Parkway - Preferred Alternative

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-986



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-393	3.0	Lean CLAY (CL)	28		55

KLEINFELDER

Legacy Parkway - Preferred Alternative

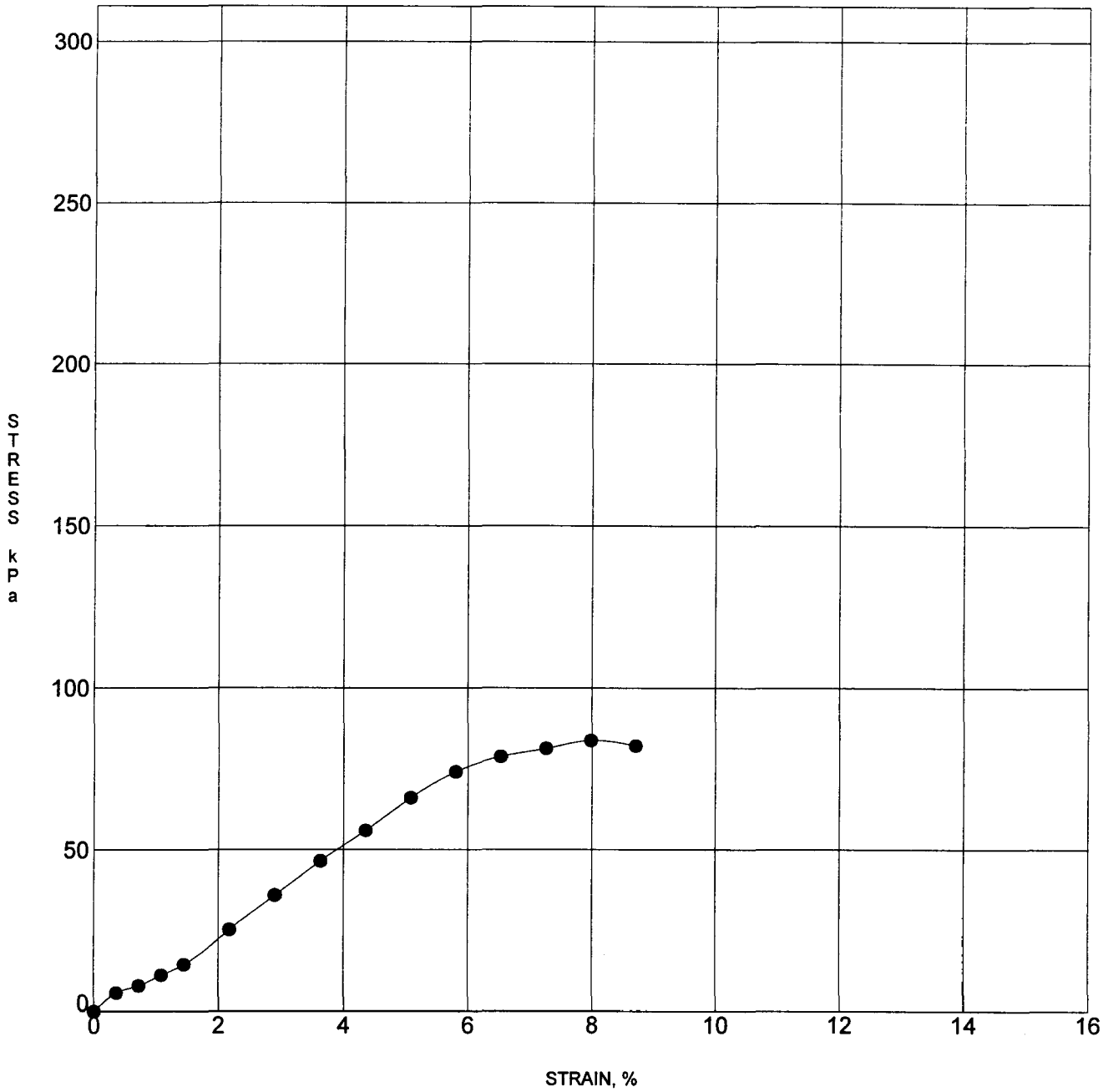
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-987

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-394	2.1	Lean CLAY (CL)	84	15.5	30

KLEINFELDER

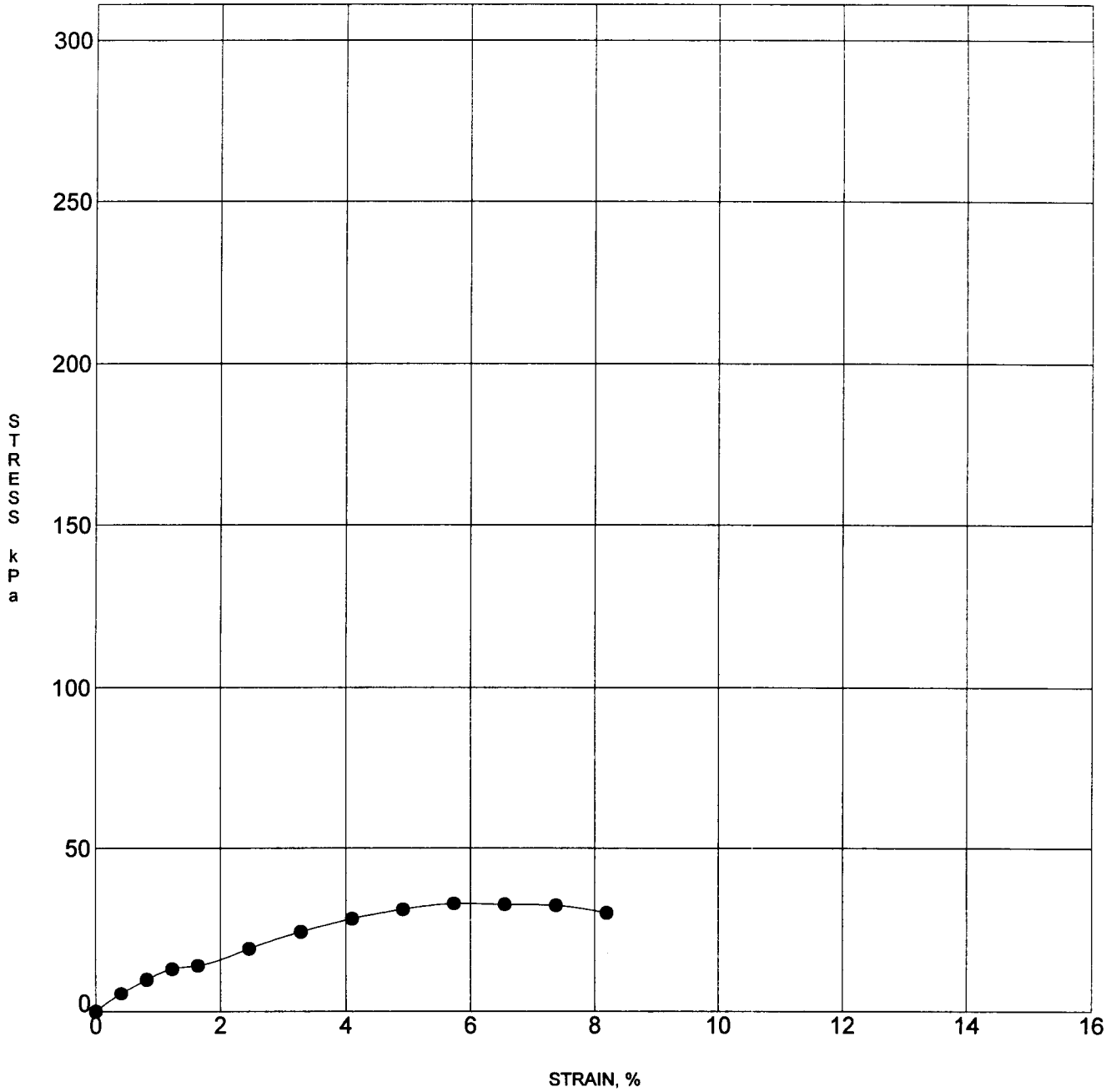
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-988



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-395	4.6	Lean CLAY (CL)	33	16.7	22

KLEINFELDER

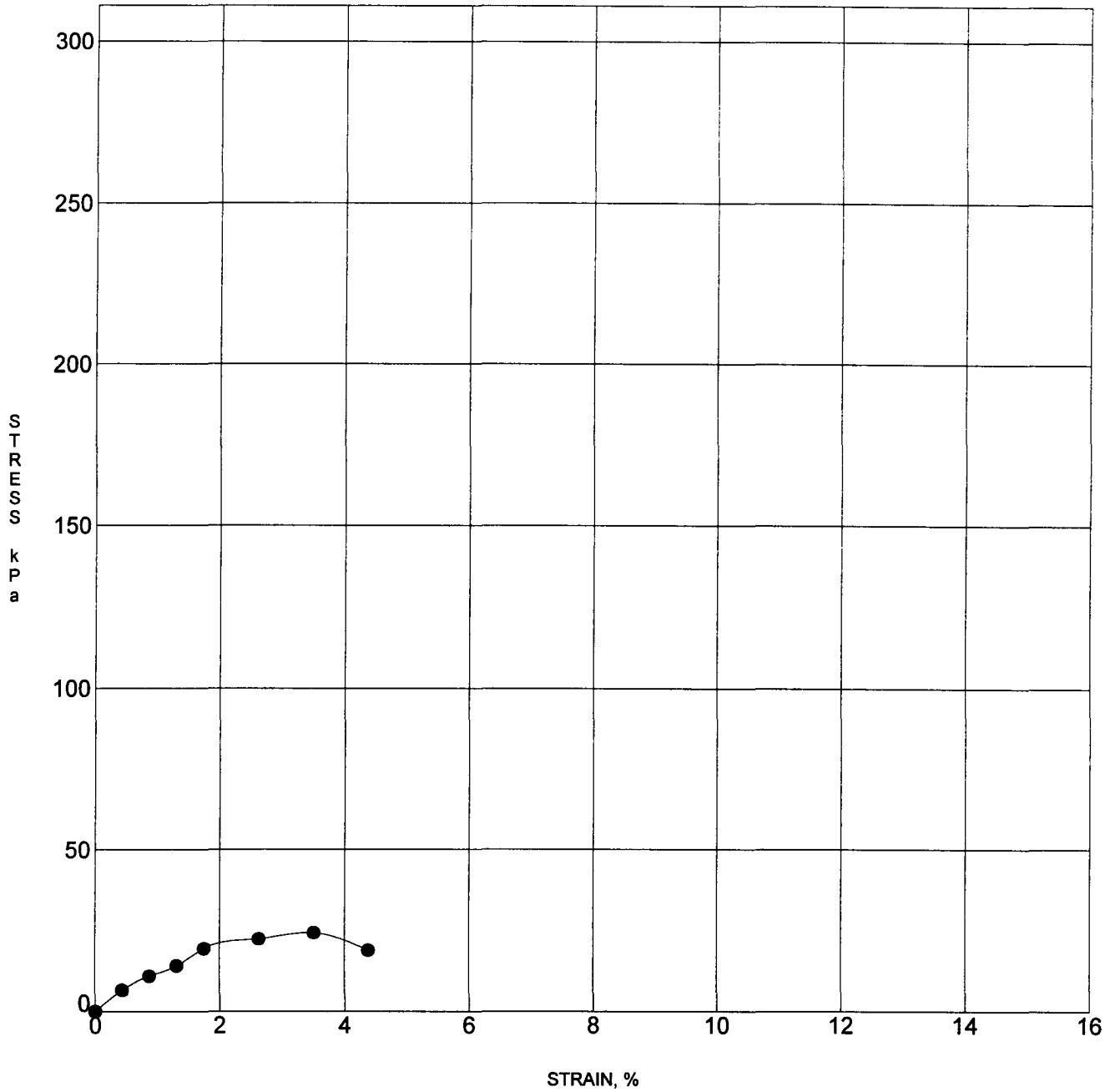
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-989

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-397	7.6	Sandy SILT (ML)	24	16.7	28

KLEINFELDER

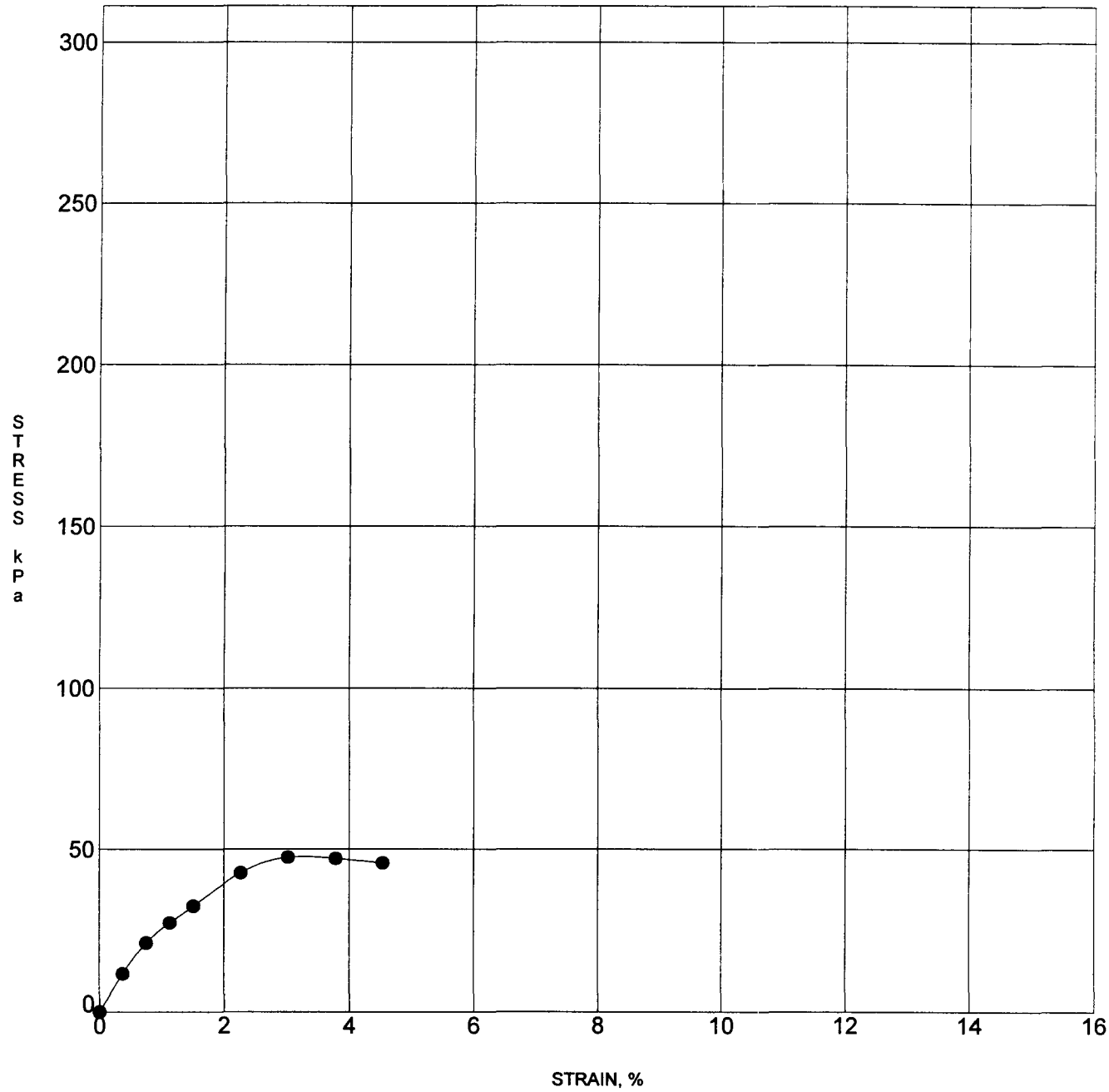
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-990

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-398	4.6	Lean CLAY (CL)	47	14.8	28

KLEINFELDER

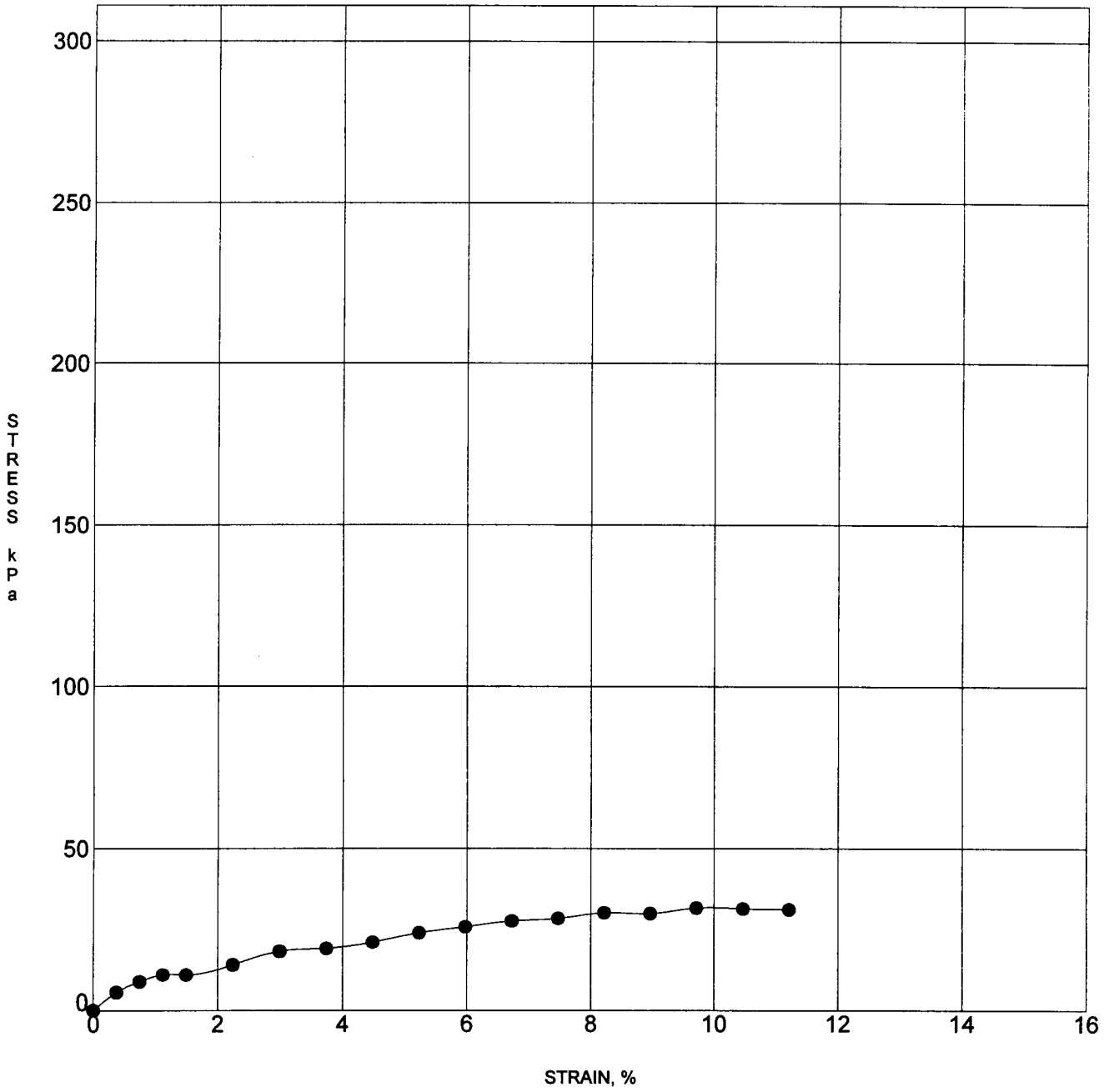
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-991

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-399	4.6	Lean CLAY (CL)	32	14.2	38

KLEINFELDER

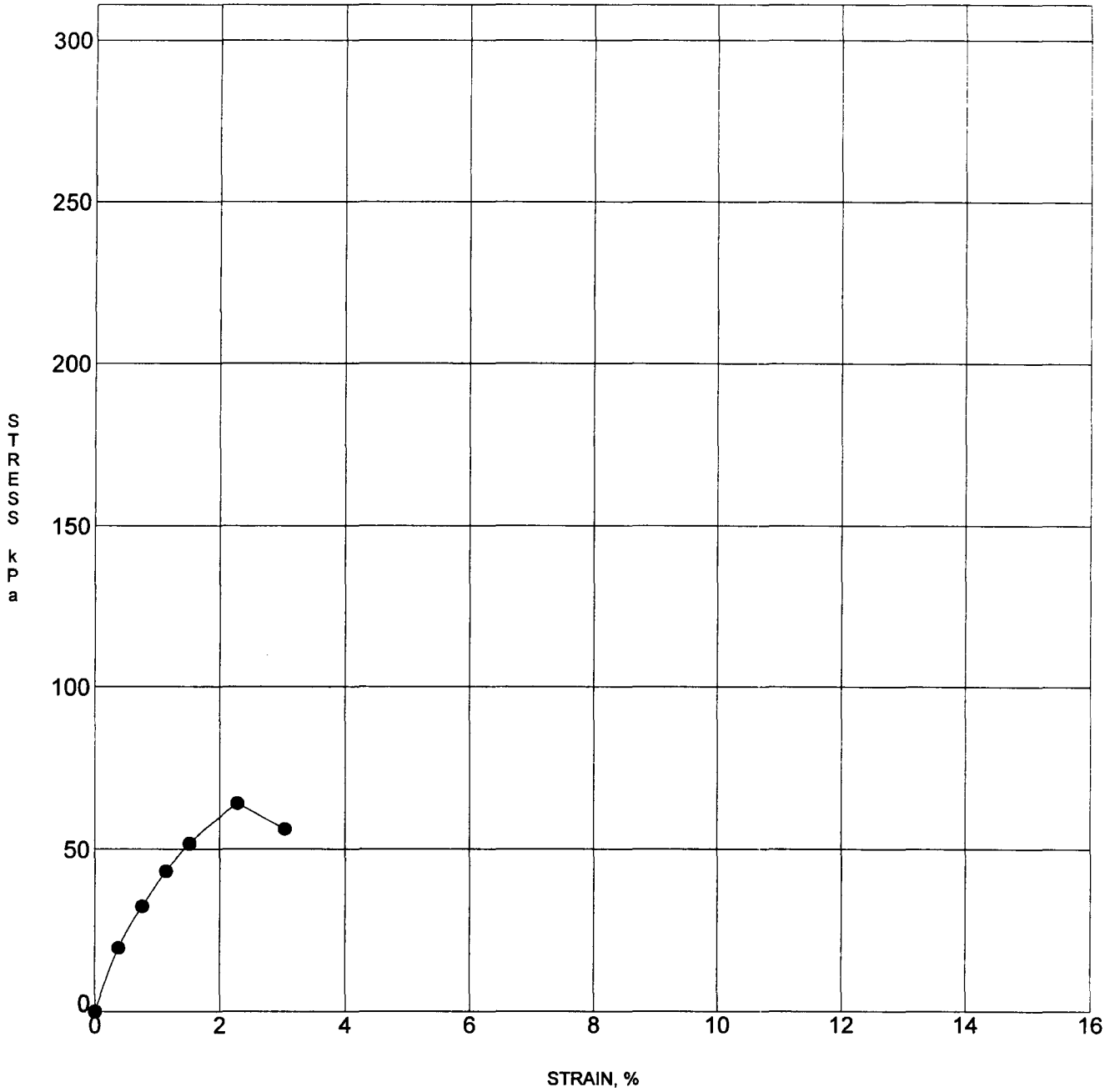
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-992



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-400 4.6		Lean CLAY (CL)	64	15.6	27

KLEINFELDER

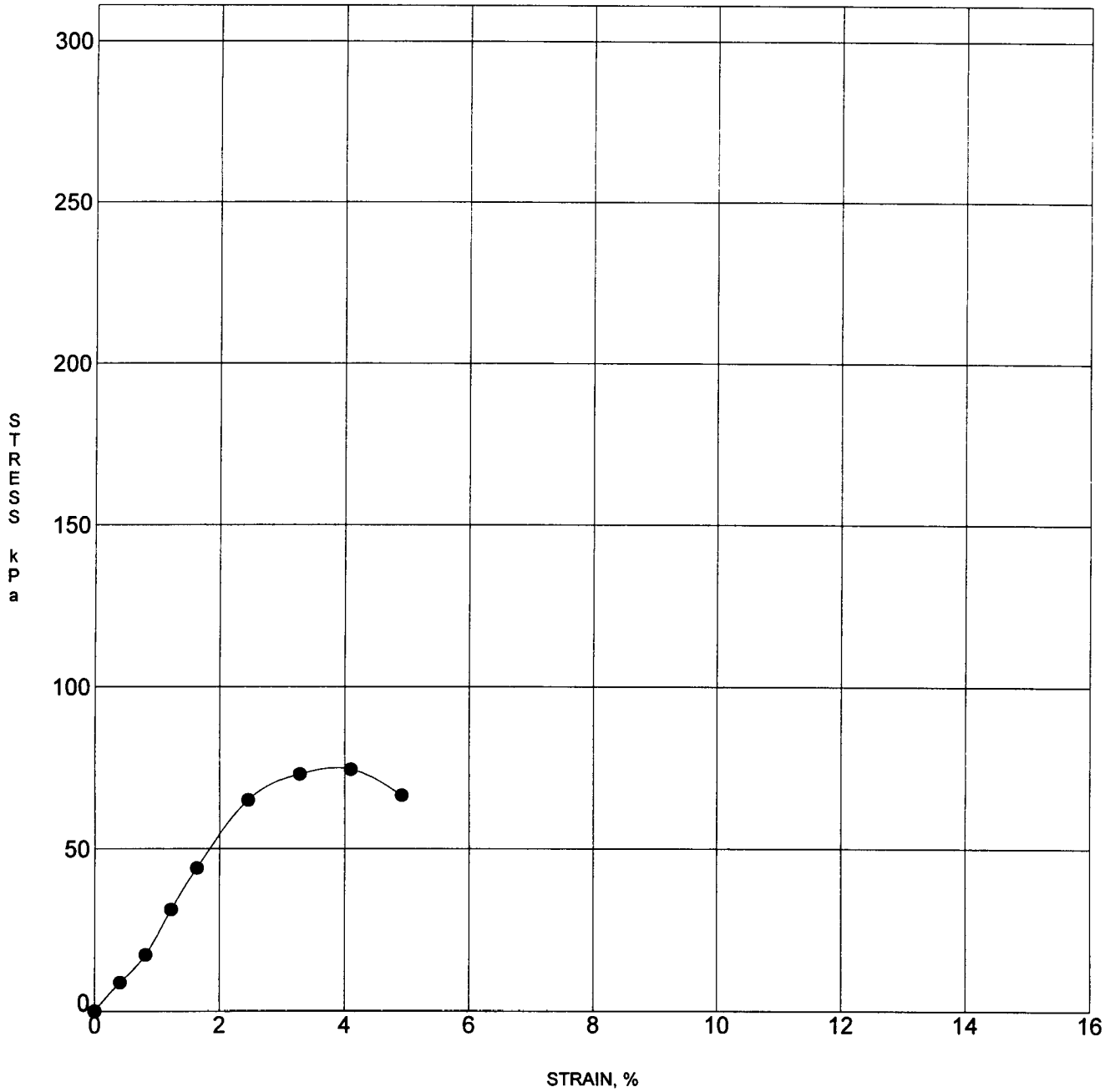
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-993



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-401	4.6	SILT with sand (ML)	74	14.3	27

KLEINFELDER

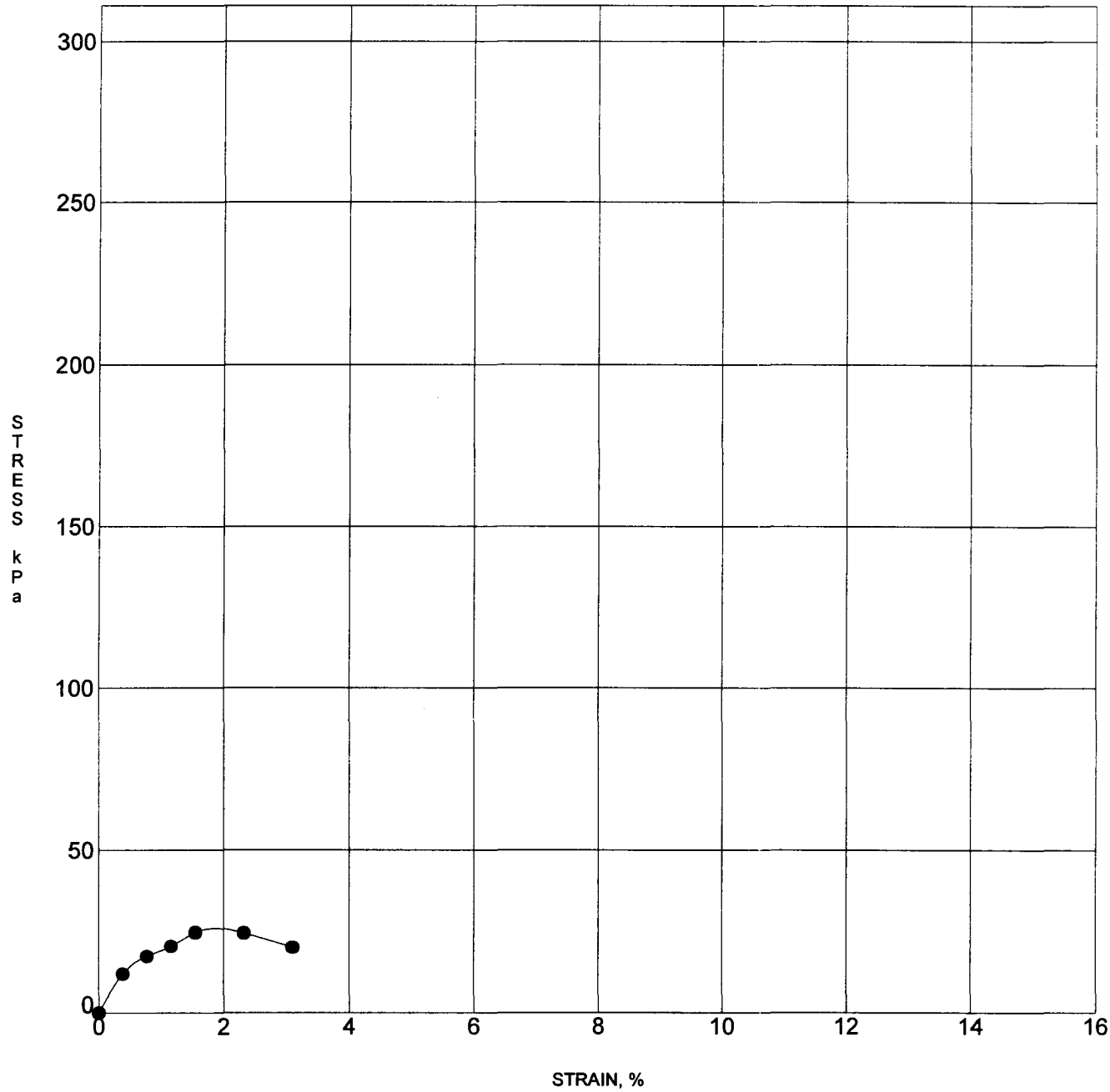
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-994

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-402	4.6	Lean CLAY (CL)	25	12.6	40

KLEINFELDER

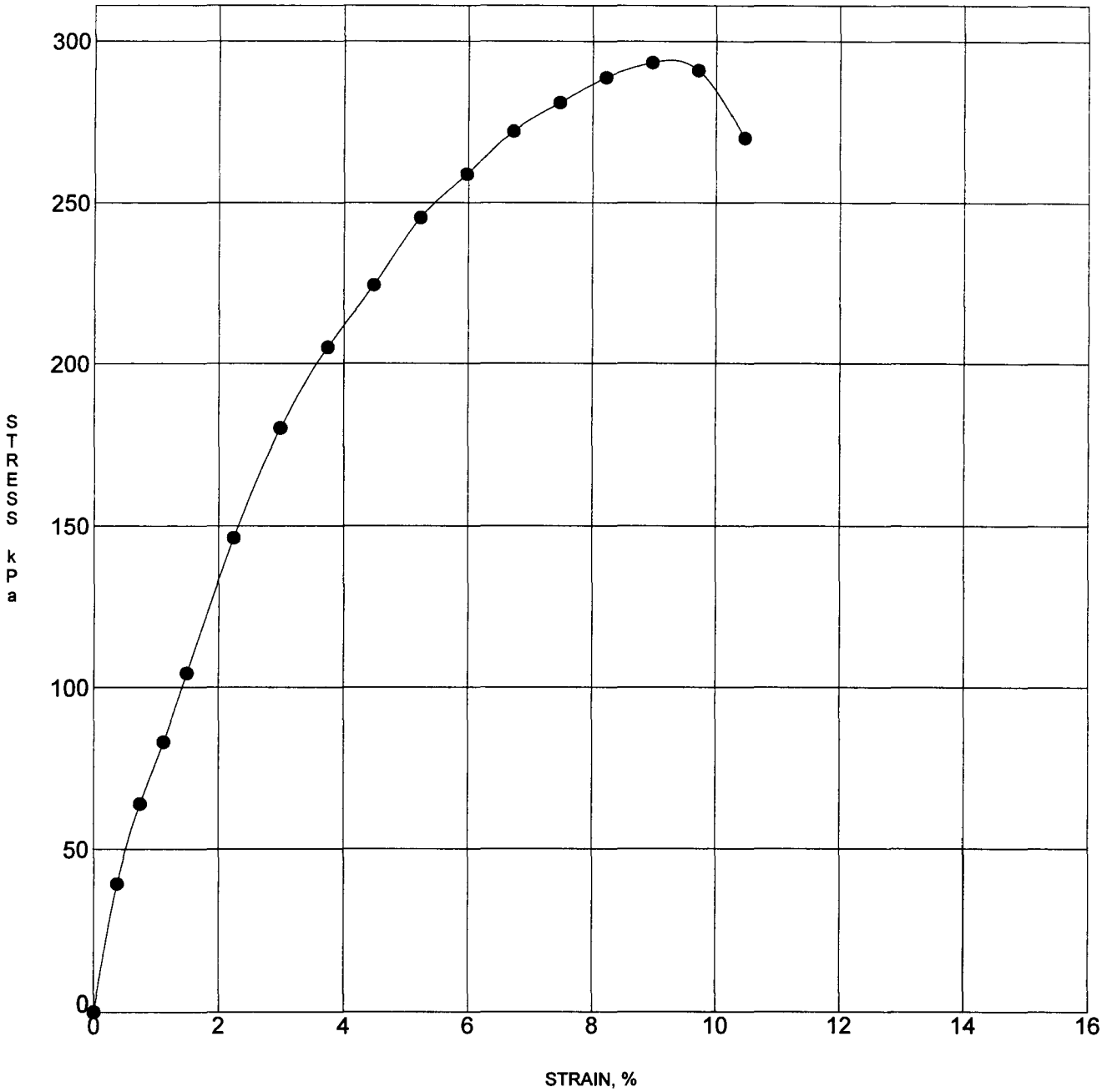
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-995

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-403	1.5	Lean CLAY (CL)	293	16.7	22

KLEINFELDER

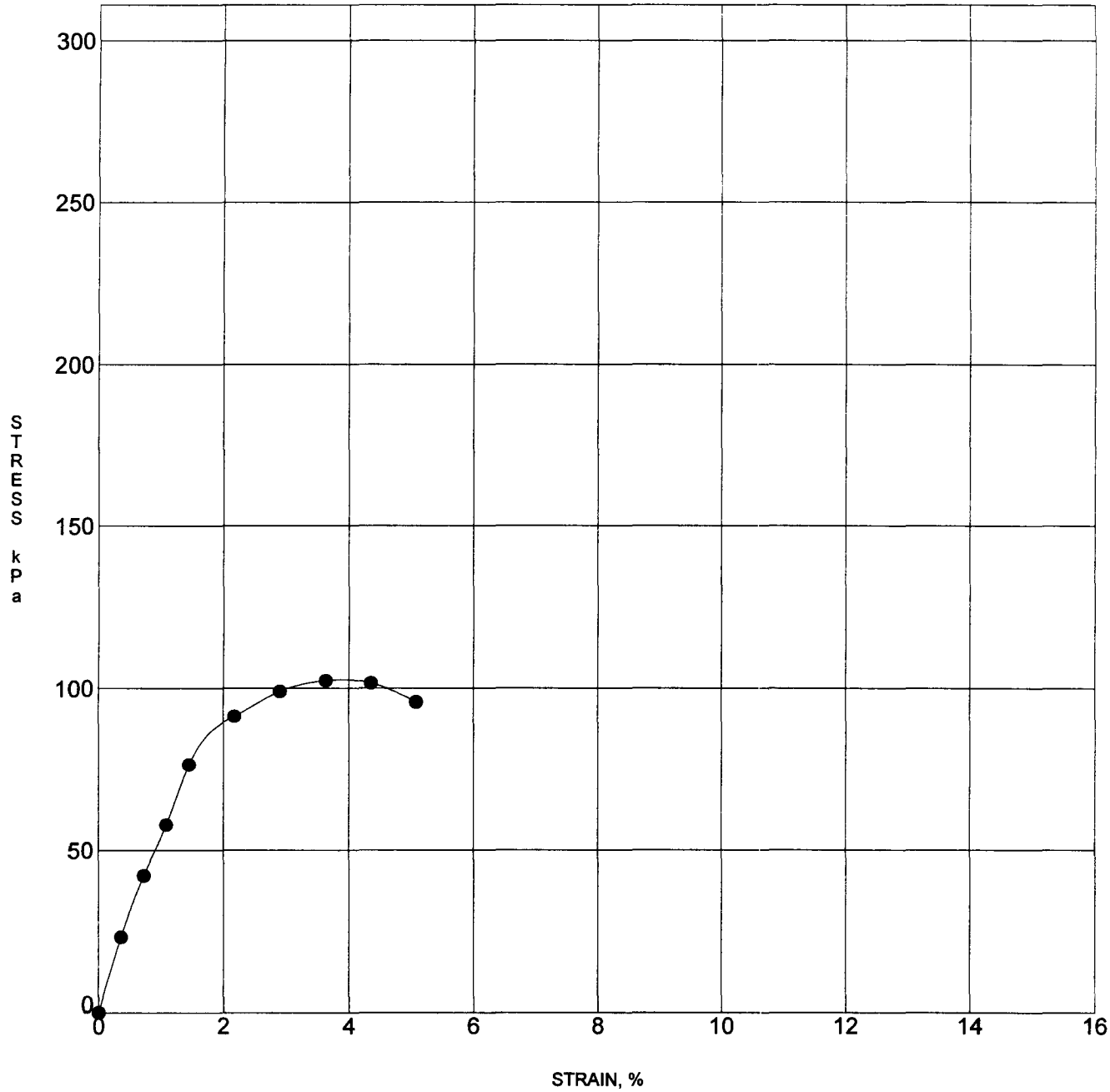
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-996

PROJECT NO. 35-8163-05



Specimen Identification			USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
●	RB-404	7.6	Lean CLAY (CL)	102	11.9	47

KLEINFELDER

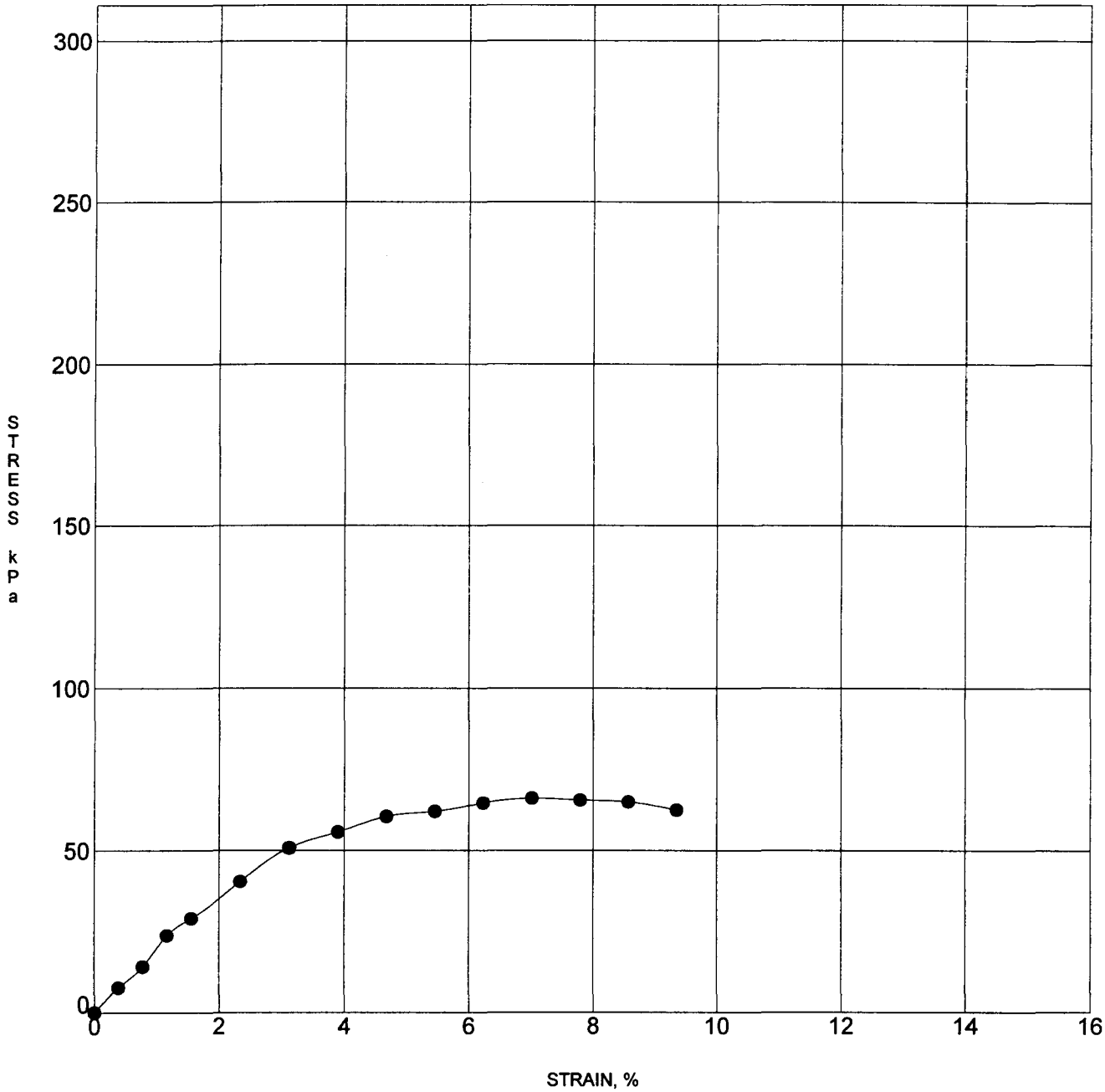
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-997

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-405 7.6		Lean CLAY (CL)	66	11.9	47

KLEINFELDER

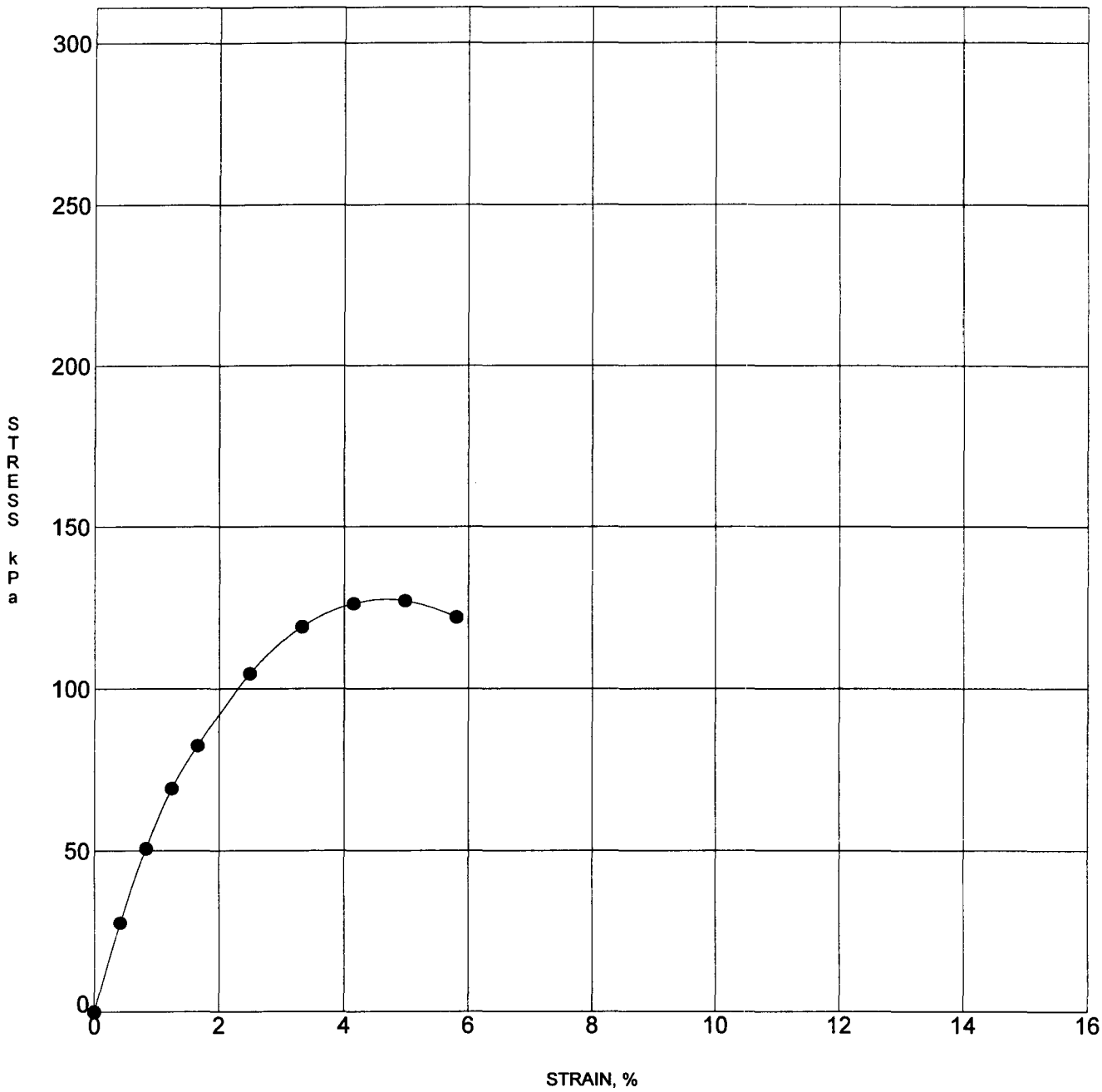
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-998

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-406	4.6	Lean CLAY (CL)	127	14.5	31

KLEINFELDER

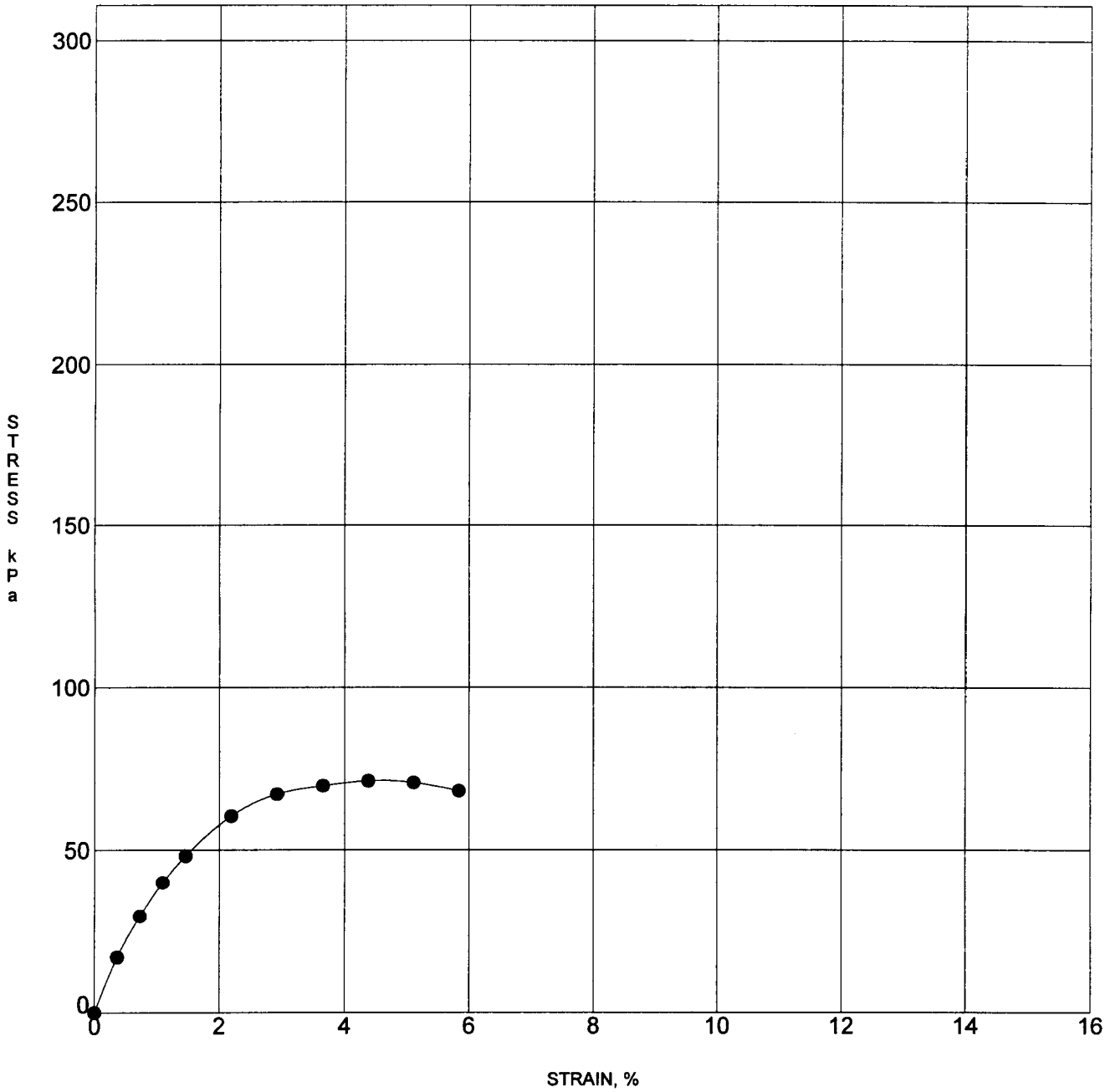
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-999

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-407	7.6	Lean CLAY (CL)	71	12.7	41

KLEINFELDER

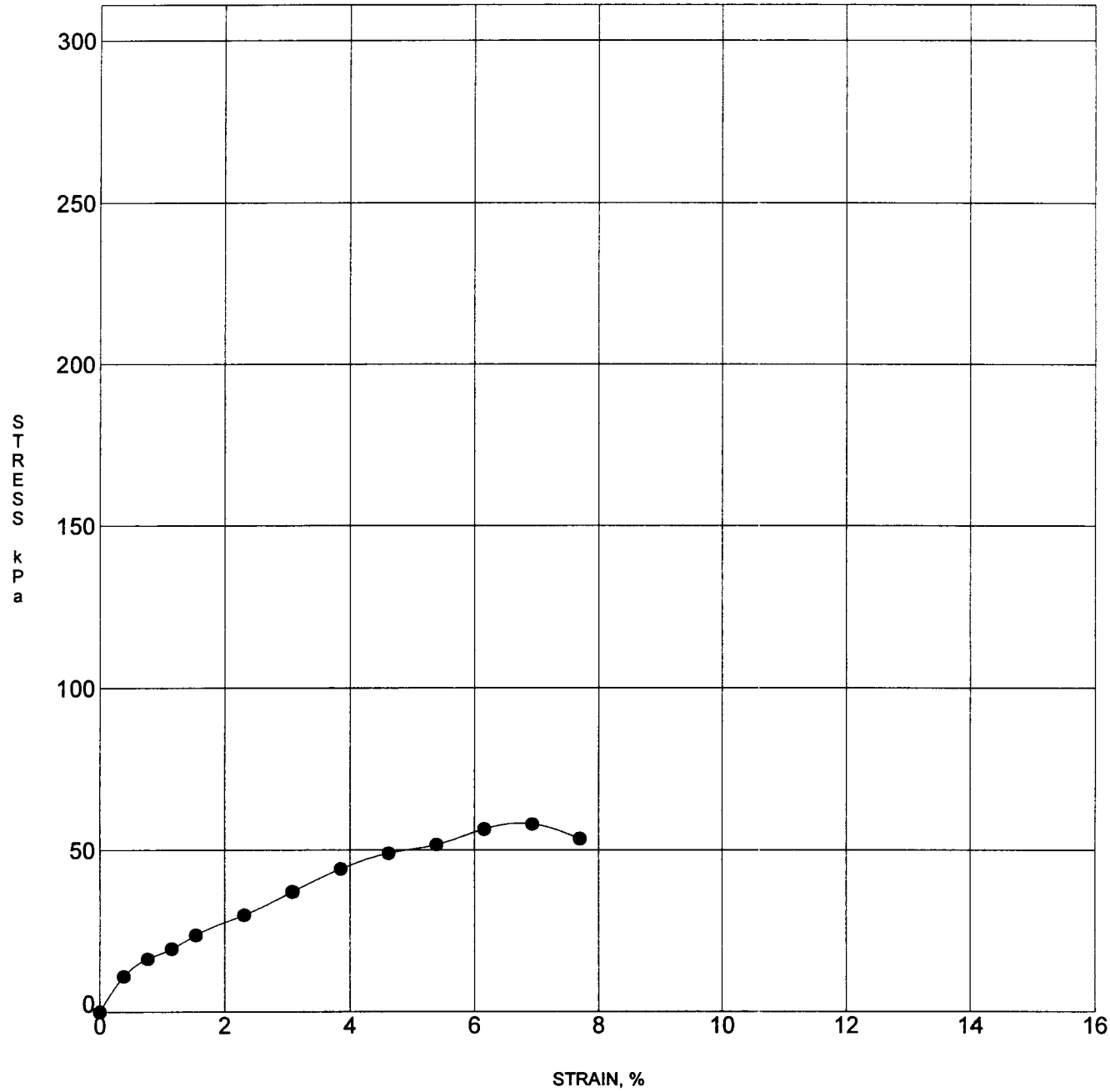
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1000

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-408	1.5	SILT with sand (ML)	58	14.4	31

KLEINFELDER

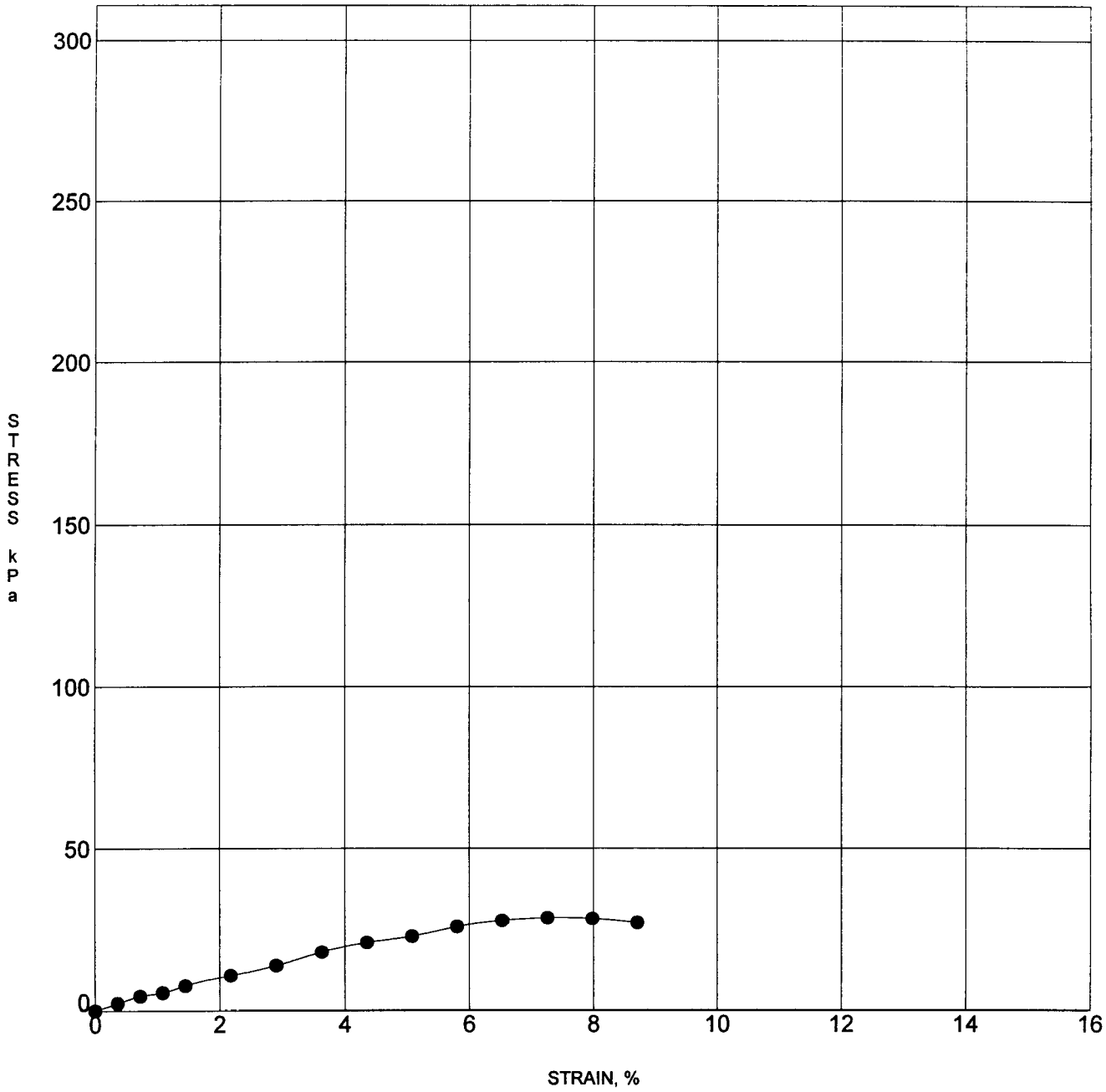
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1001

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m³)	MC%
● RB-409	4.6	Lean CLAY (CL)	28	16.2	31

KLEINFELDER

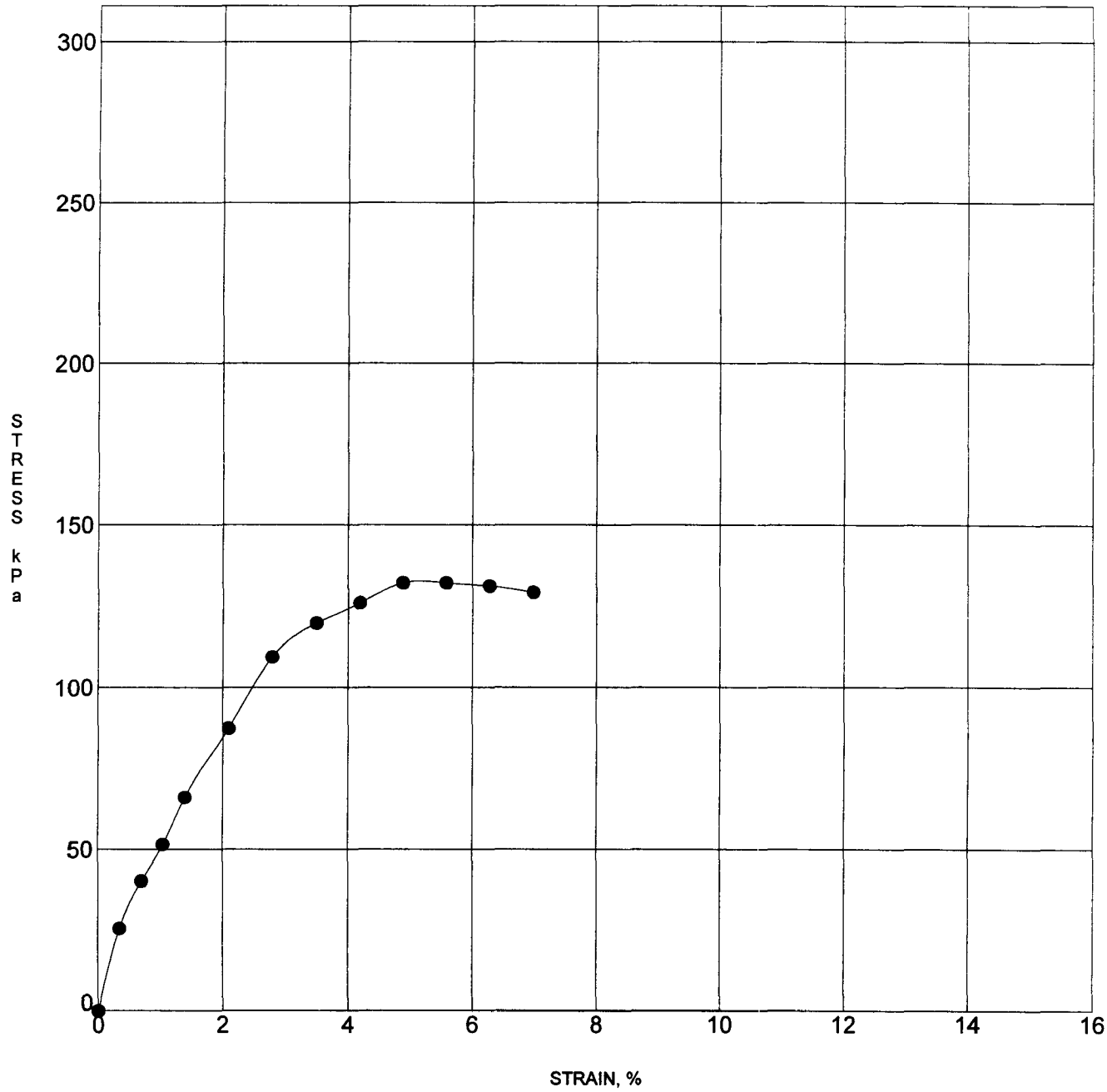
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1002

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-410	1.5	Lean CLAY (CL)	132	16.4	23

KLEINFELDER

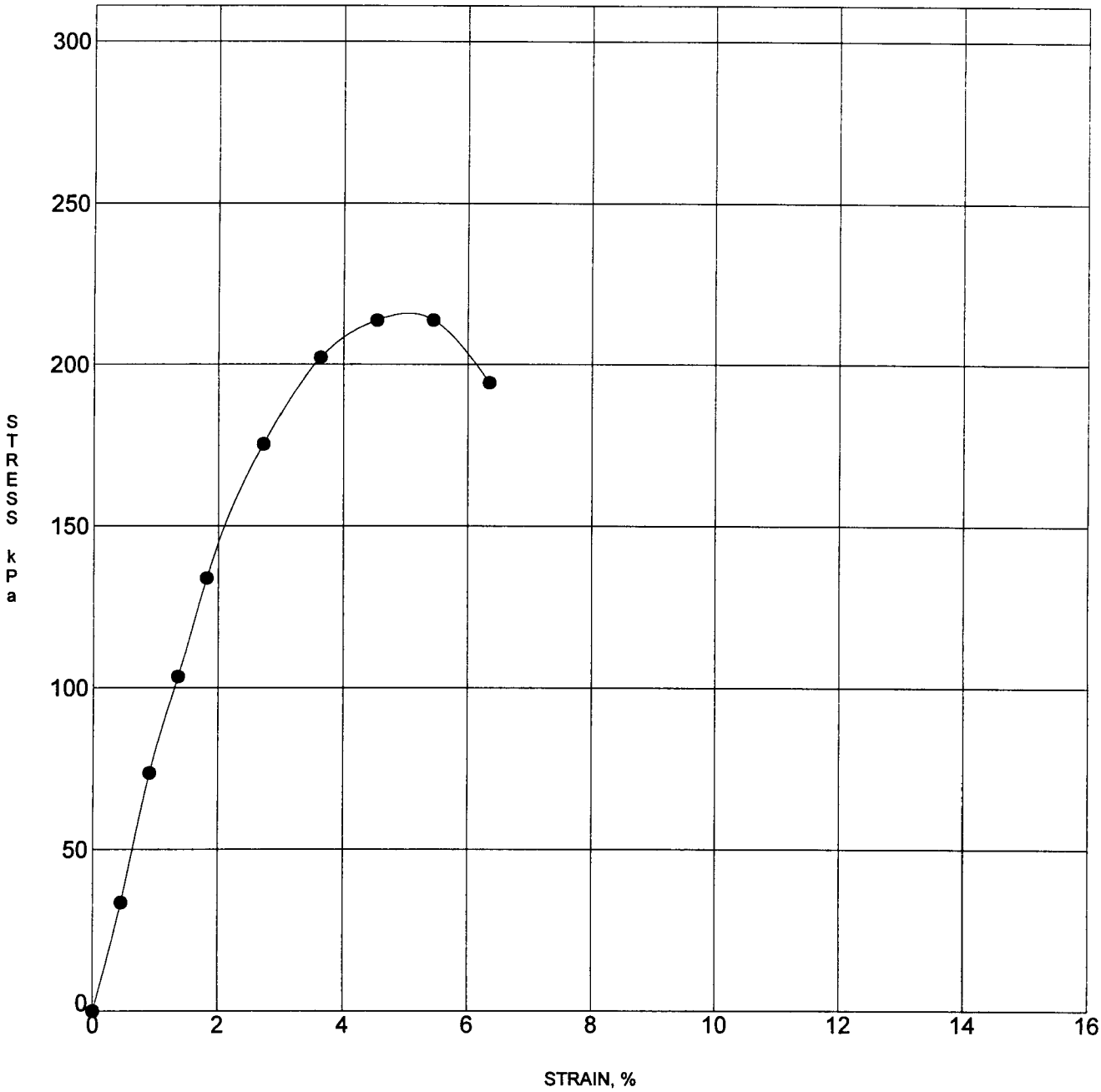
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1003

PROJECT NO. 35-8163-05



	Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-411	1.5	Lean CLAY (CL)	214	16.5	23

KLEINFELDER

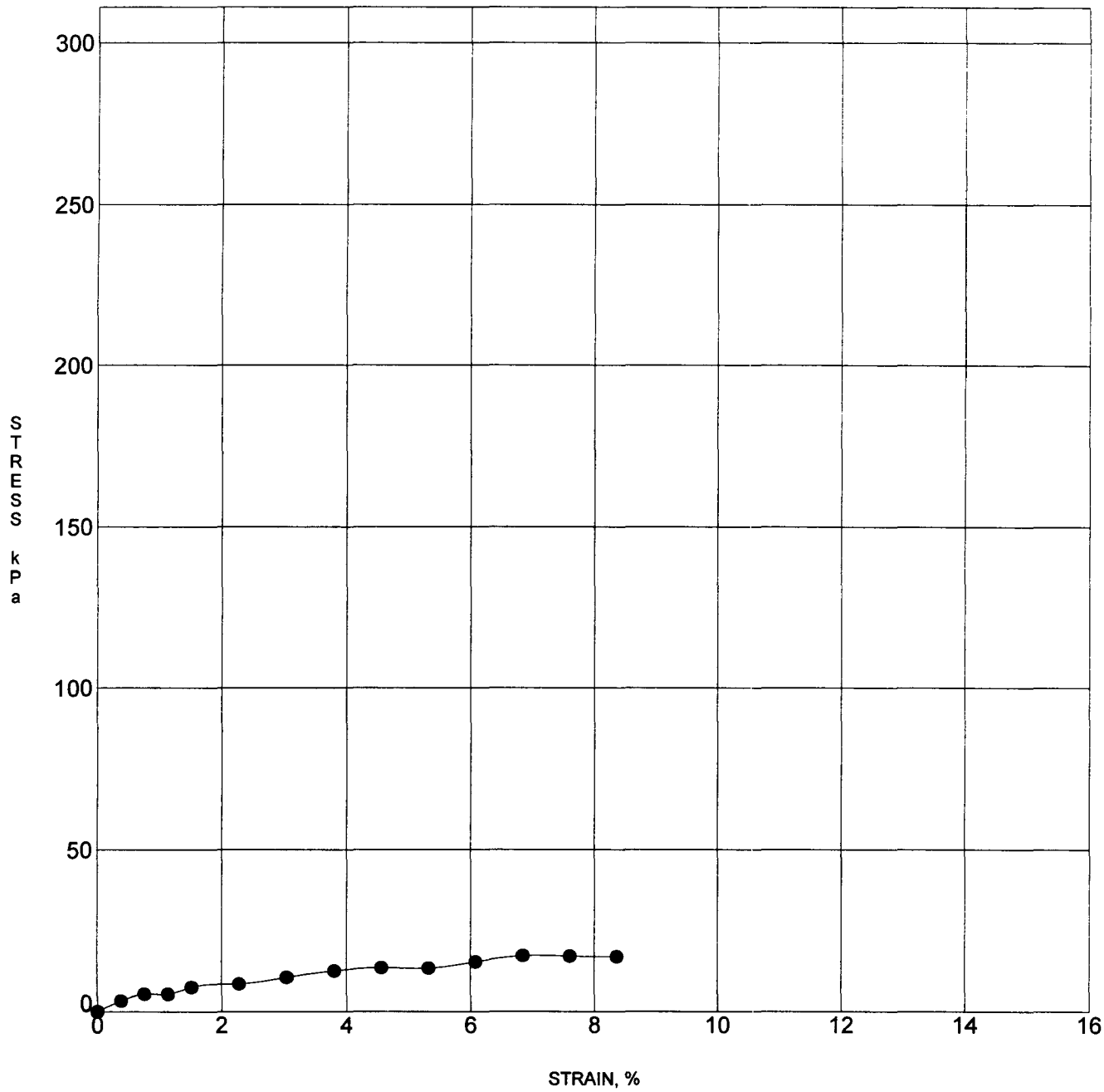
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1004

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-413	7.6	Fat CLAY (CH)	17	12.8	44

KLEINFELDER

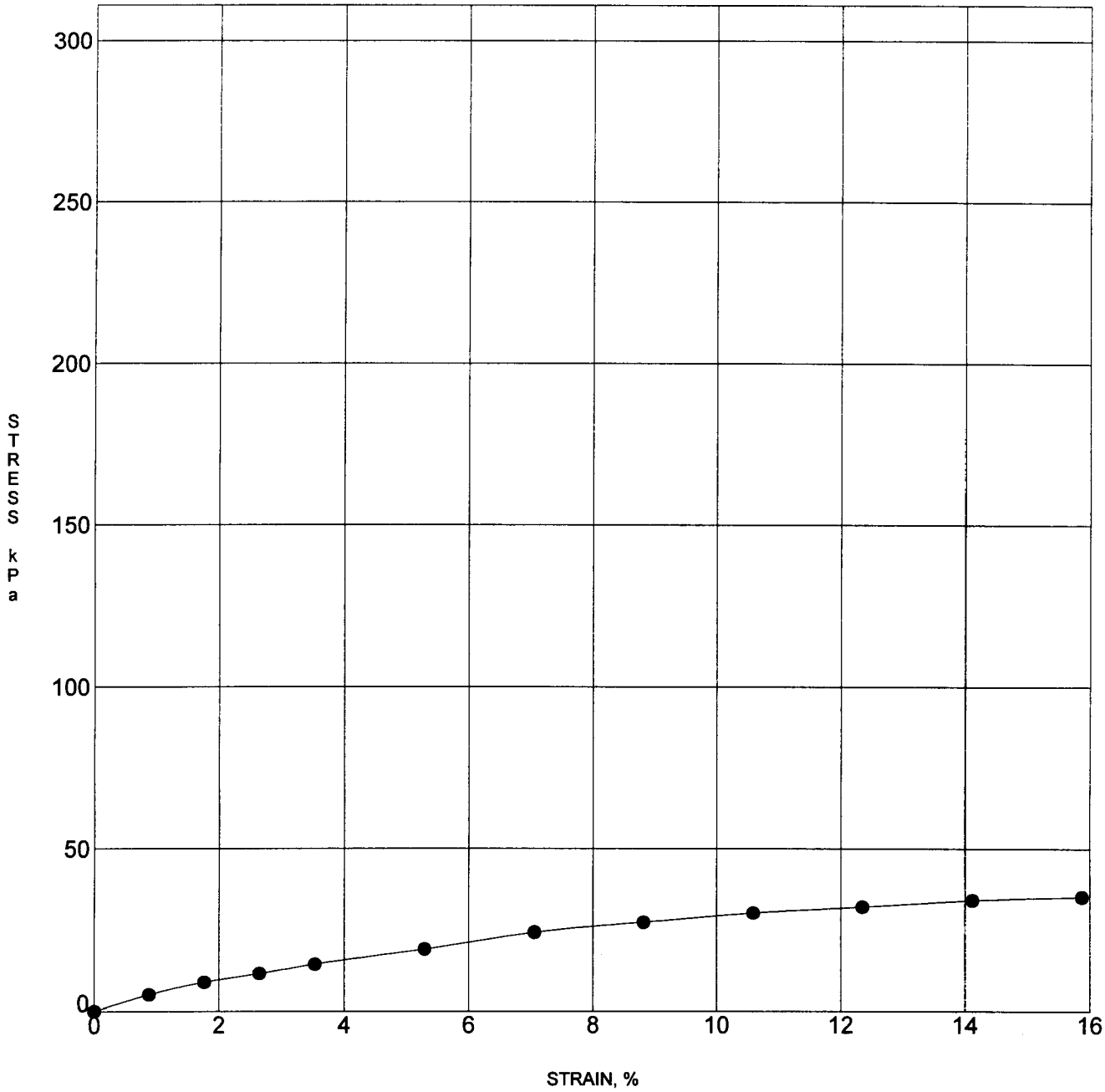
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1005

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-414	1.5	Lean CLAY (CL)	35	8.0	23

KLEINFELDER

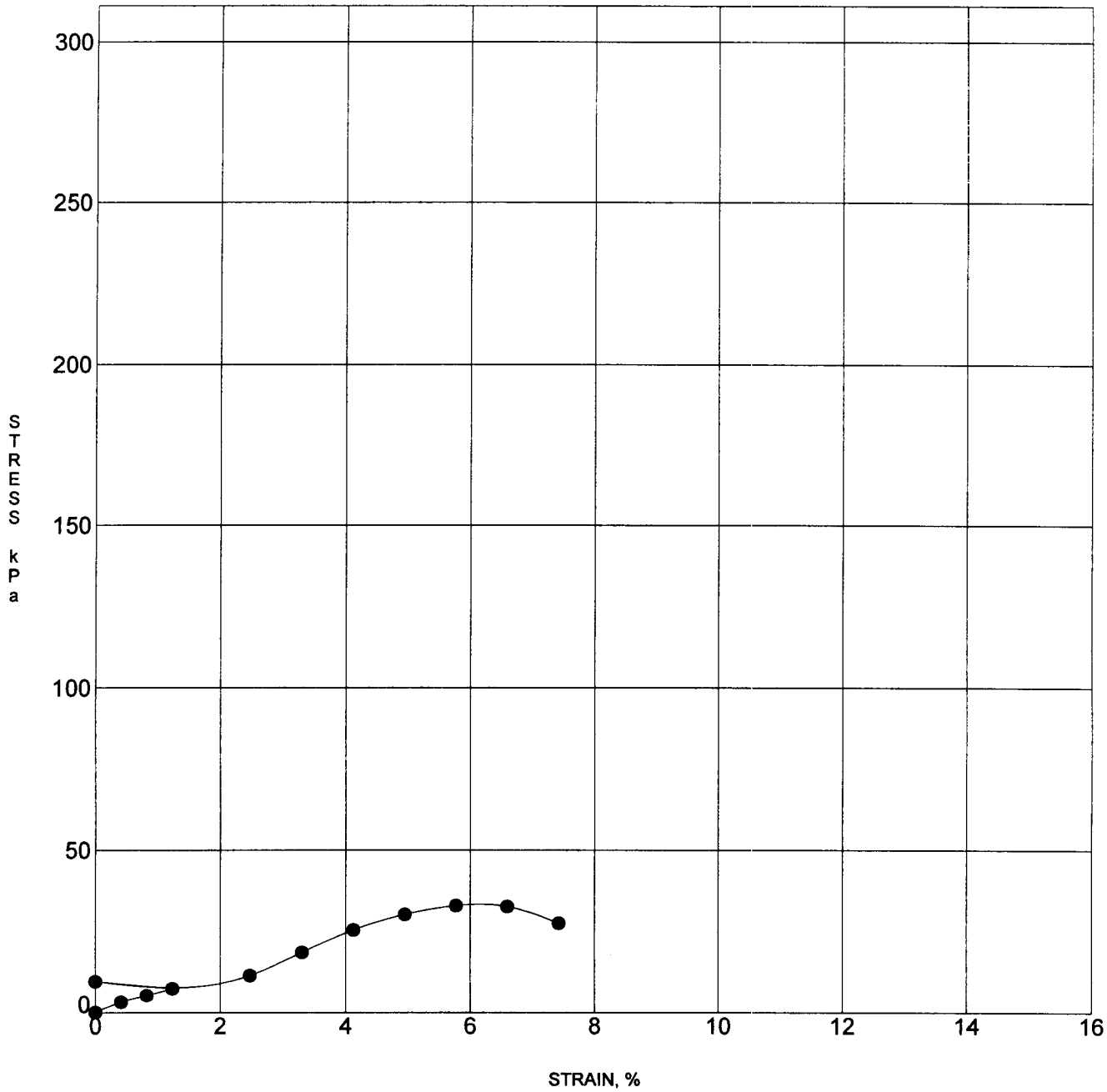
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1006



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-415	7.6	Sandy Lean CLAY (CL)	33	13.2	38

KLEINFELDER

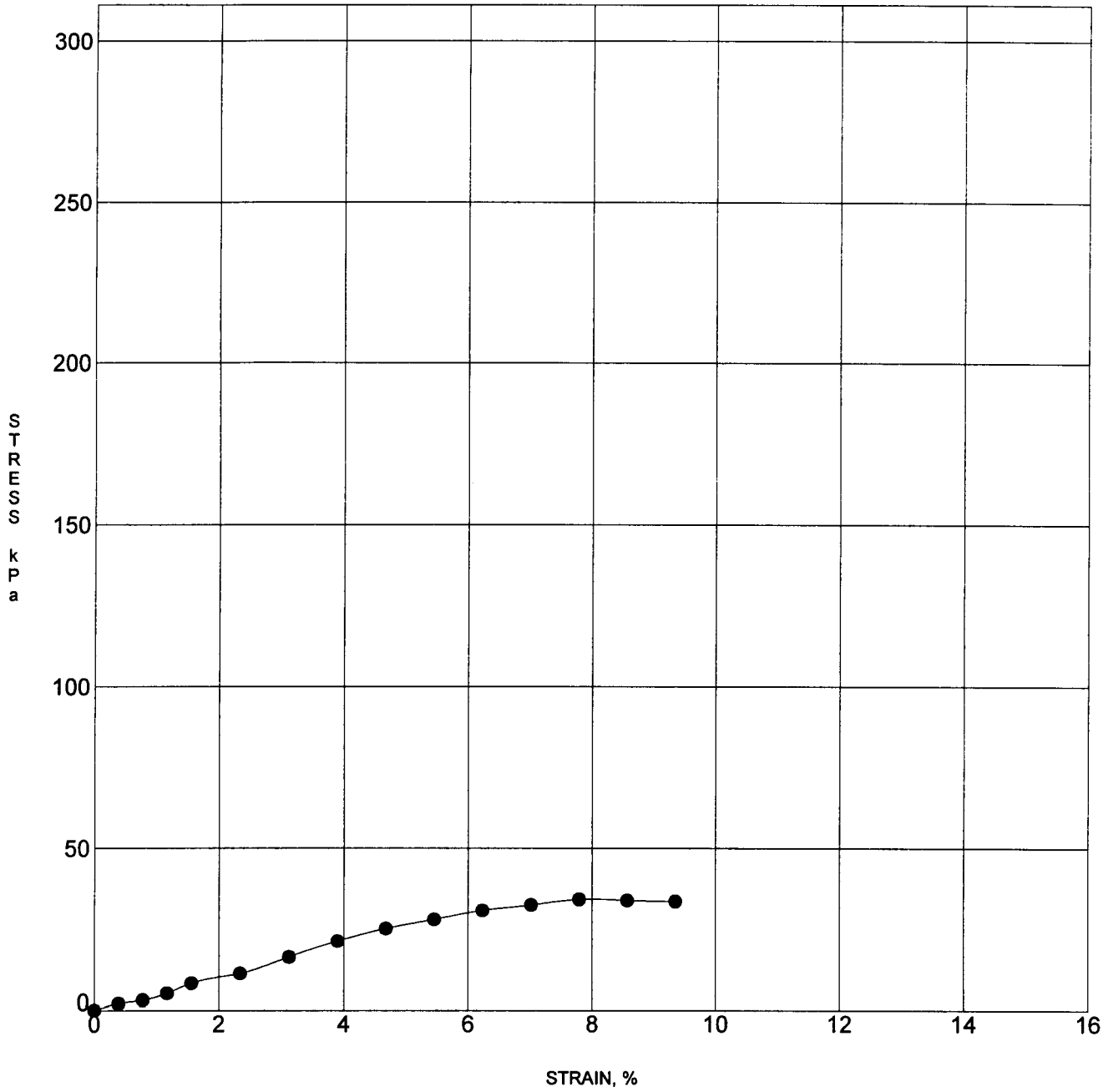
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1007

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-417	7.6	Lean CLAY (CL)	34	13.3	38

KLEINFELDER

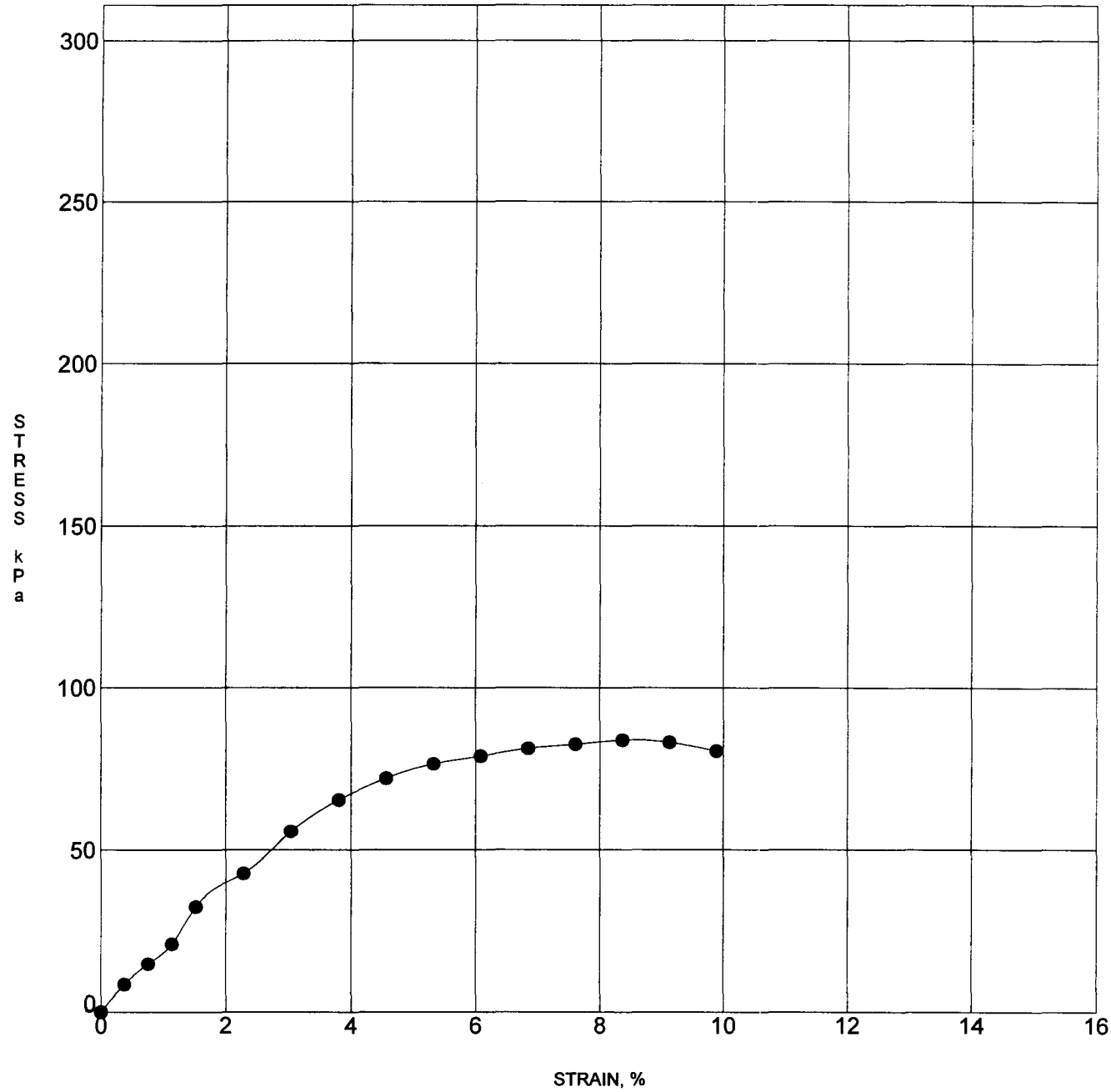
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1008



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-418	1.5	Lean CLAY (CL)	84	14.7	29

KLEINFELDER

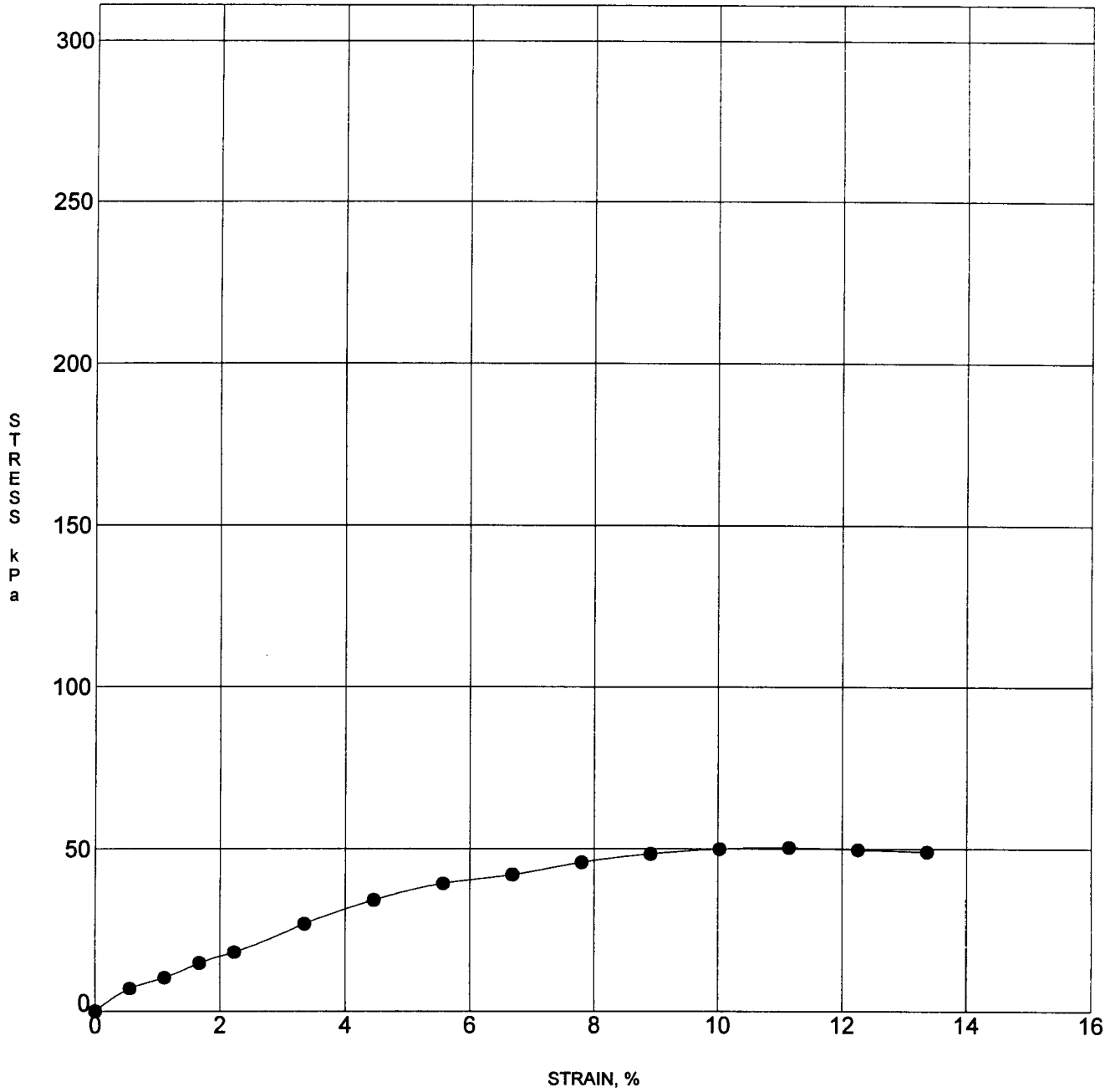
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1009

PROJECT NO. **35-8163-05**



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-420 4.6		Lean CLAY (CL)	50	16.6	28

KLEINFELDER

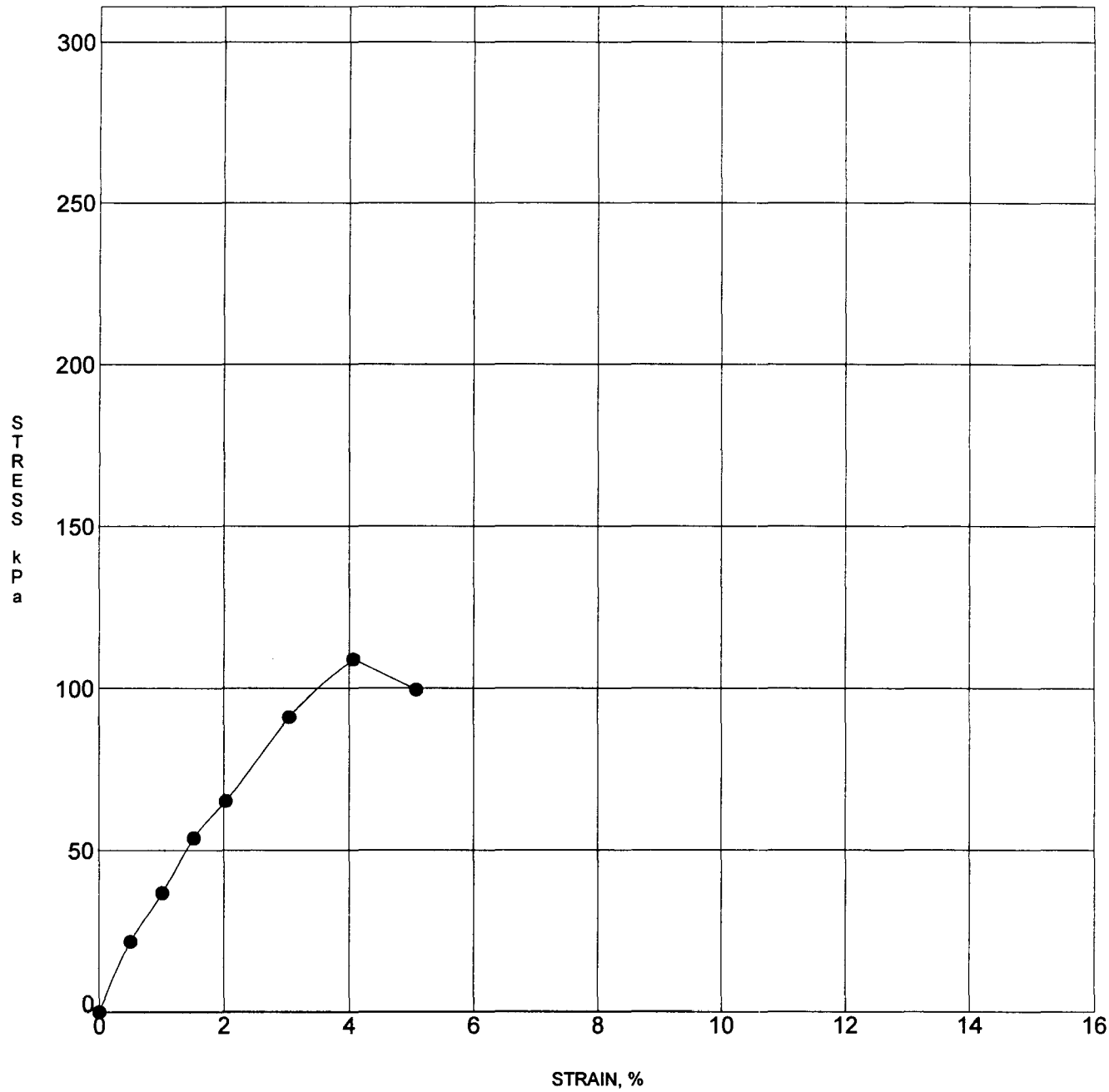
PROJECT NO. 35-8163-05

I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1010



Specimen Identification		USCS Classification	q_U (kPa)	DD (kN/m^3)	MC%
● RB-421	1.5	Lean CLAY (CL)	109	16.9	20

KLEINFELDER

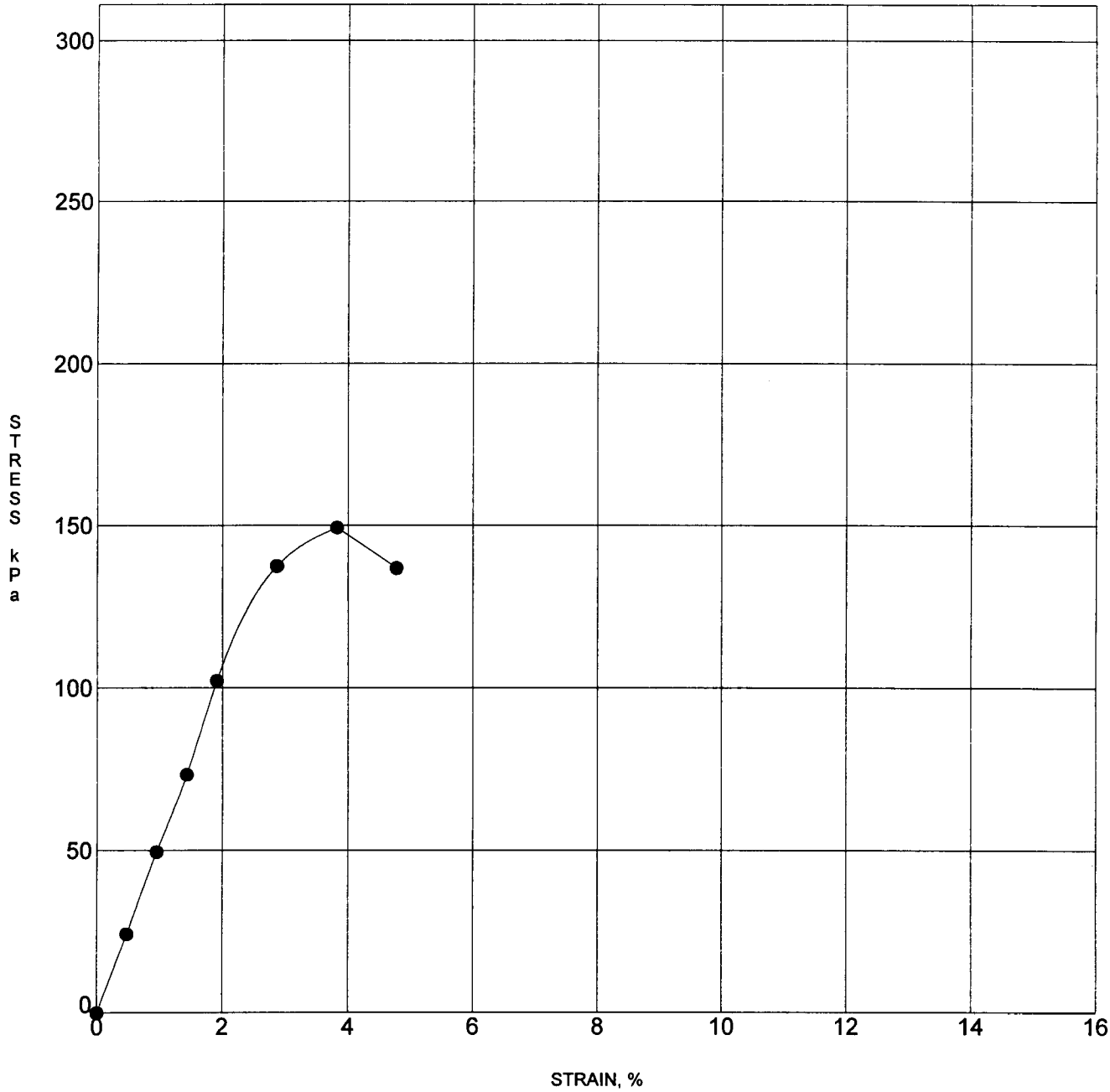
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1011

PROJECT NO. **35-8163-05**



	Specimen Identification	USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
●	RB-422 6.1	Lean CLAY (CL)	149	14.8	27

KLEINFELDER

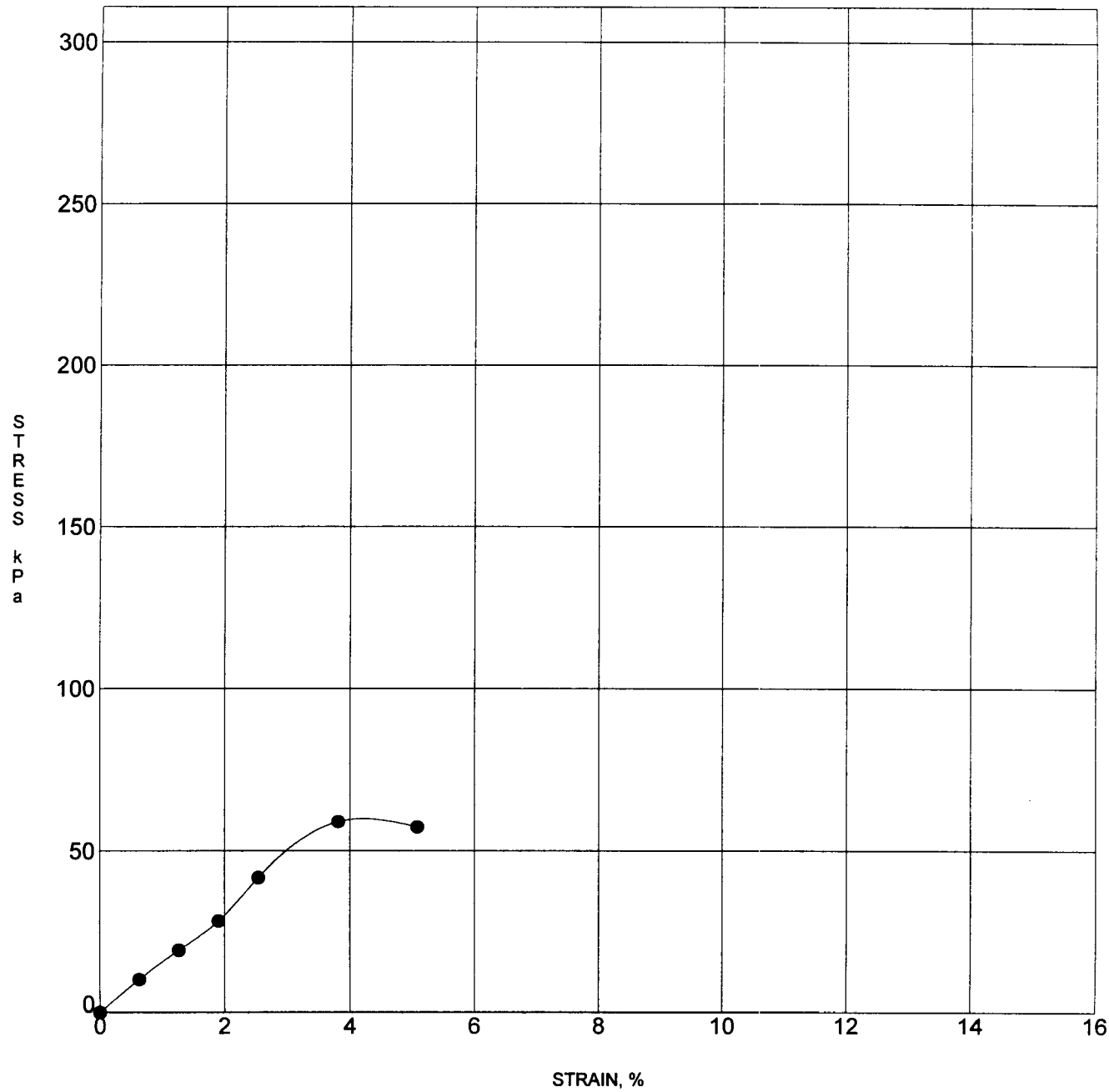
I-215 to I-15/US 89 Interchange

UNCONFINED COMPRESSION TEST

PLATE

K-1012

PROJECT NO. 35-8163-05



Specimen Identification		USCS Classification	q_u (kPa)	DD (kN/m^3)	MC%
● RB-423	4.6	Sandy SILT (ML)	59	16.3	27

KLEINFELDER

I-215 to I-15/US 89 Interchange

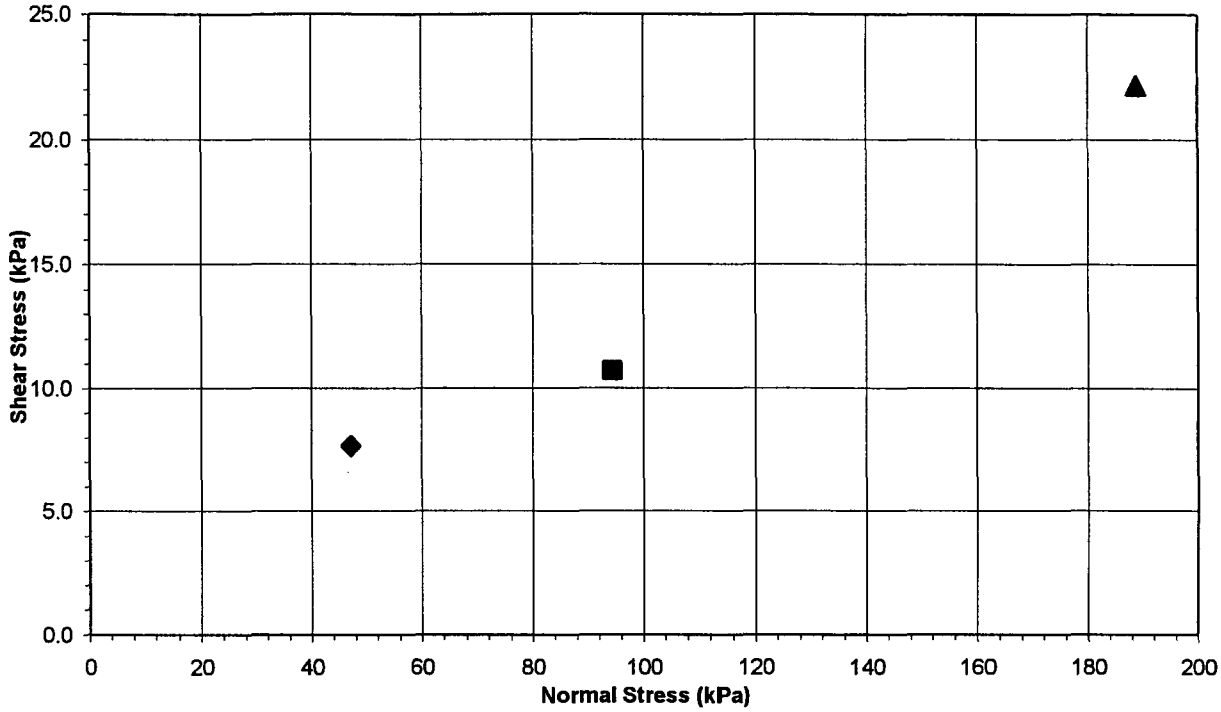
UNCONFINED COMPRESSION TEST

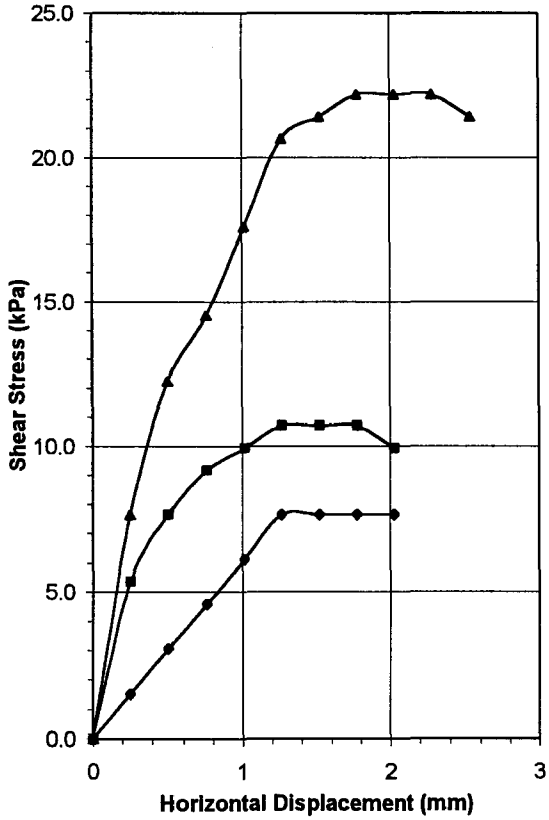
PLATE

K-1013

PROJECT NO. 35-8163-05

UNCONFINED COMPRESSION TEST





Boring: SB-5-293	Depth: 9.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	11.2	11.0	10.8
Water Content, %	52.1	53.0	54.1
Normal Stress, kPa	47	94	189
Shear Stress, kPa	8	11	22
Strain Rate	1.25 mm/min		

KLEINFELDER

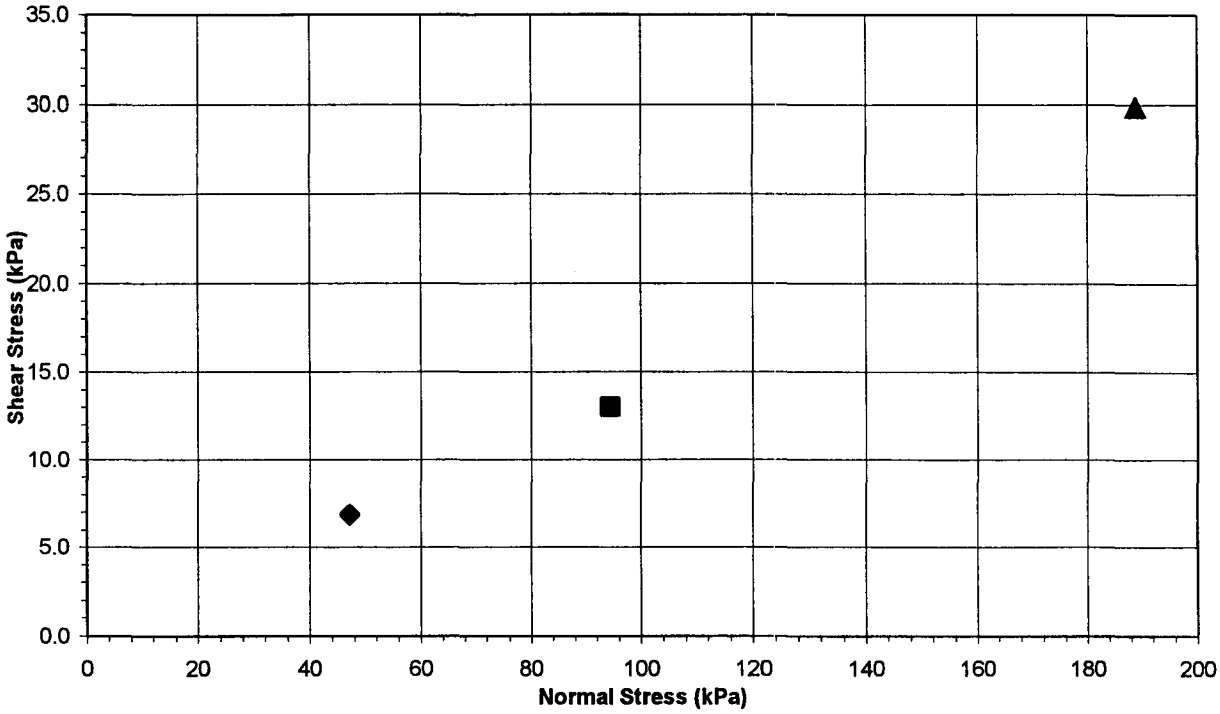
Project No. 35-8163-05

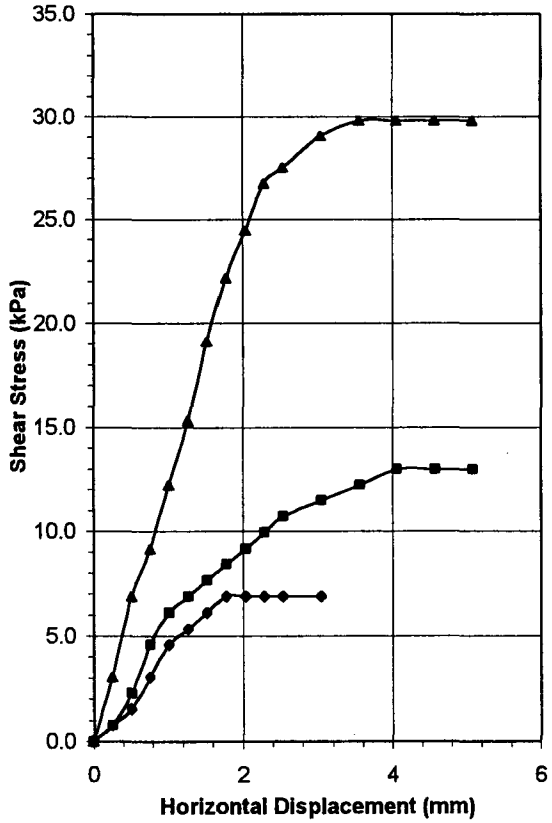
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1014





Boring: SB-6-327	Depth: 3.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	12.8	12.1	13.1
Water Content, %	39.1	40.4	36.1
Normal Stress, kPa	47	94	189
Shear Stress, kPa	7	13	30
Strain Rate	1.25 mm/min		

KLEINFELDER

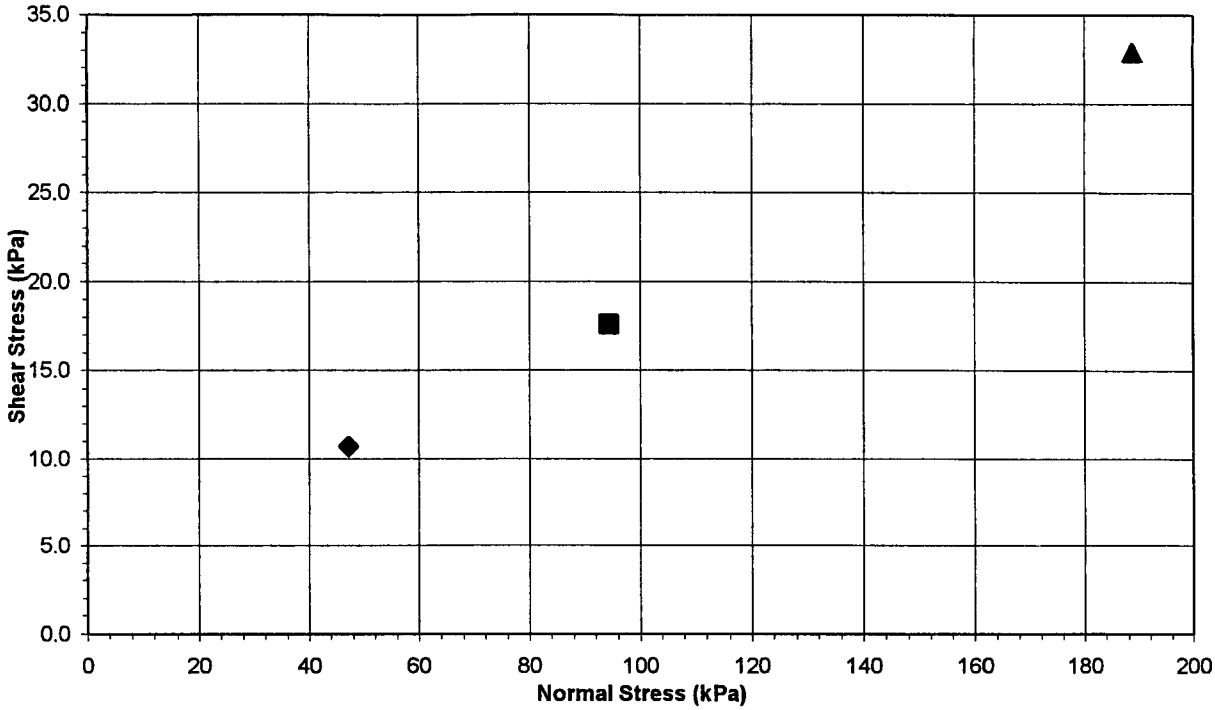
Project No. 35-8163-05

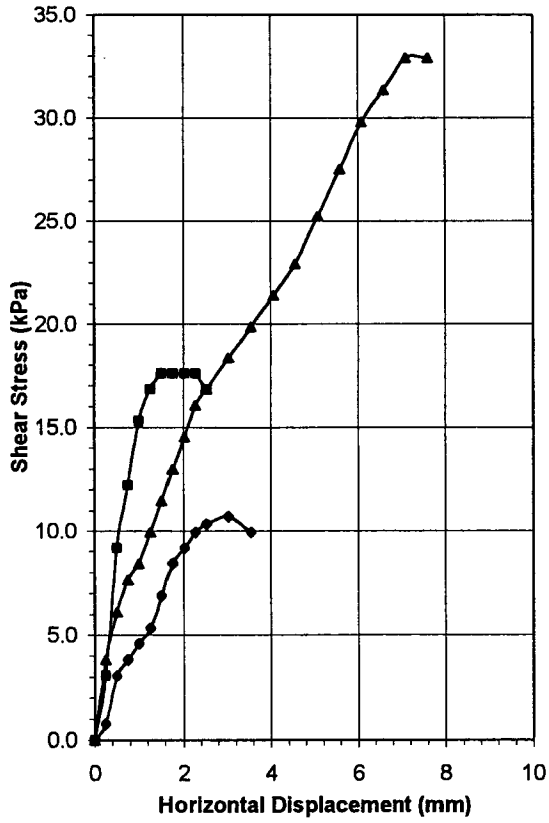
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1015





Boring: SB-6-333	Depth: 7.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	12.9	12.5	13.0
Water Content, %	38.8	41.7	38.1
Normal Stress, kPa	47	94	189
Shear Stress, kPa	11	18	33
Strain Rate	1.25 mm/min		

KLEINFELDER

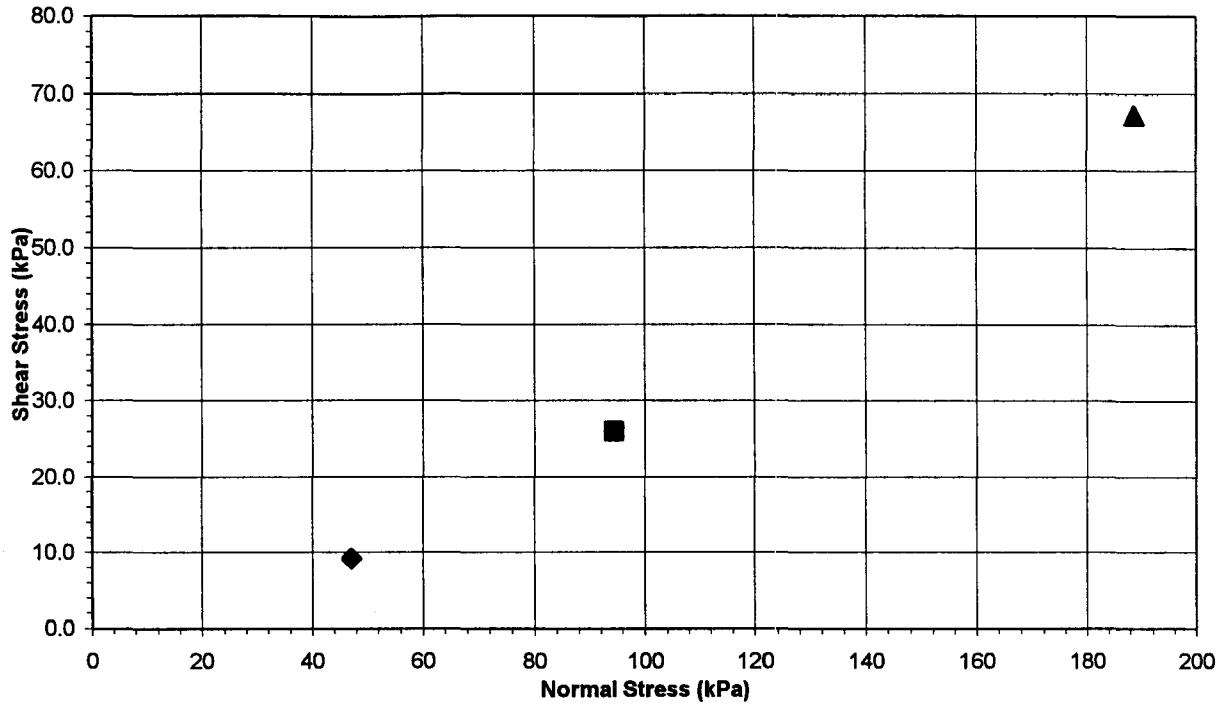
Project No. 35-8163-05

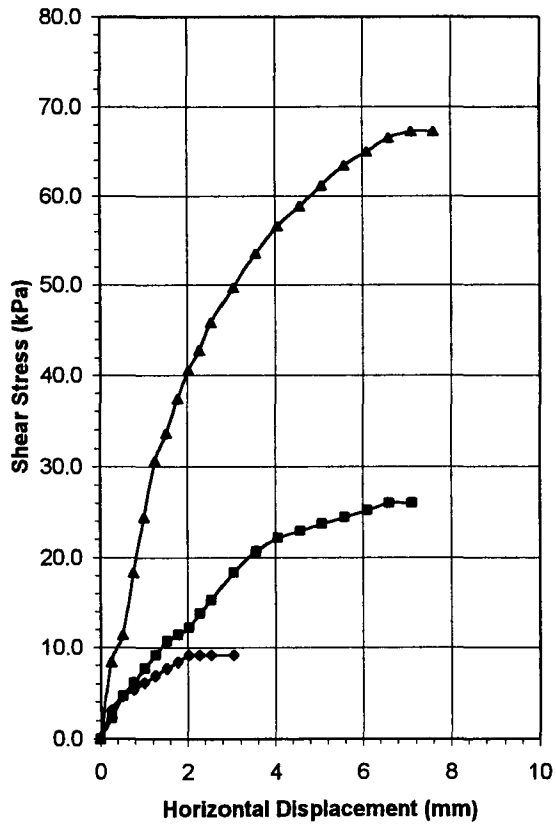
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1016





Boring: SB-19-279	Depth: 6.7 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	13.3	14.1	14.1
Water Content, %	32.6	31.8	30.8
Normal Stress, kPa	47	94	189
Shear Stress, kPa	9	26	67
Strain Rate	1.25 mm/min		

KLEINFELDER

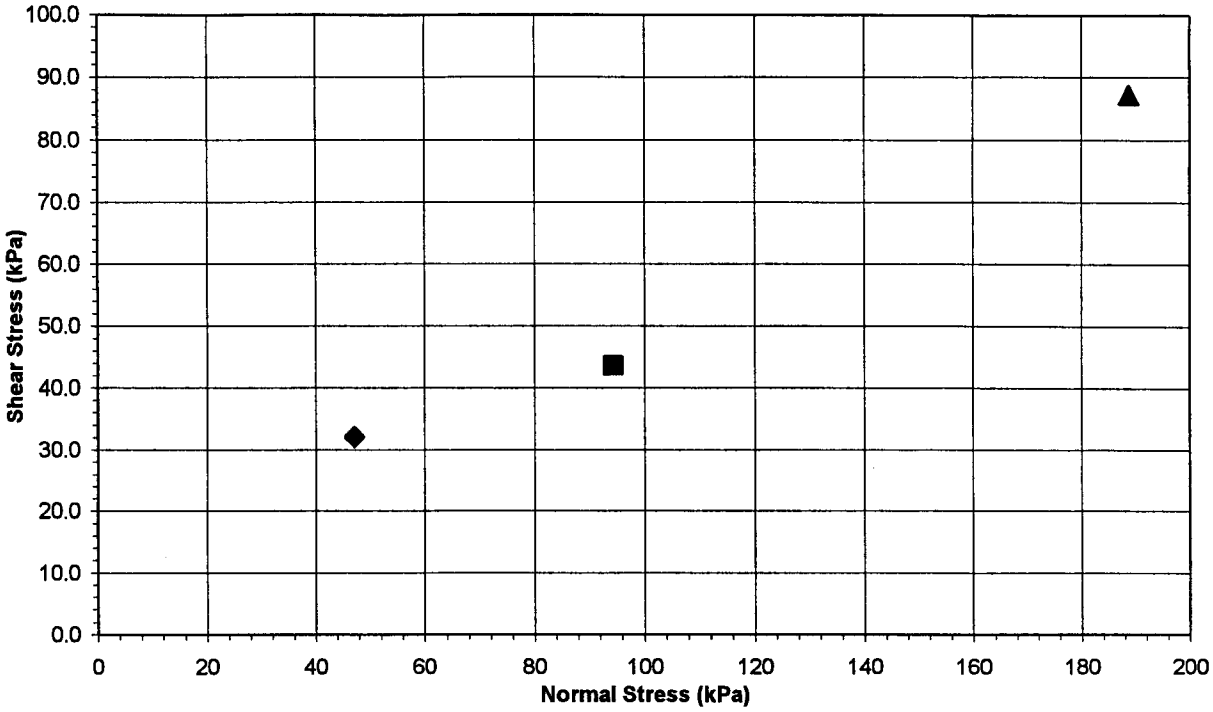
Project No. 35-8163-05

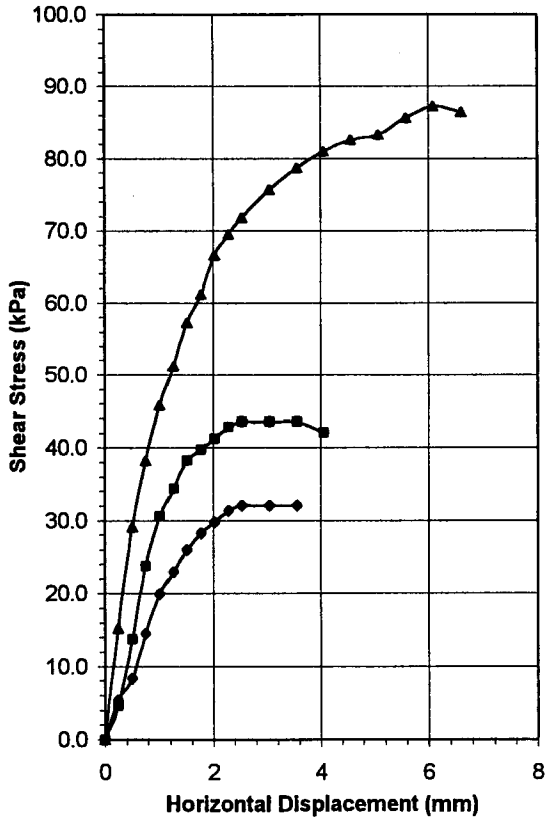
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1017





Boring: SB-31-354	Depth: 4.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	15.1	15.0	15.3
Water Content, %	29.9	29.9	26.5
Normal Stress, kPa	47	94	189
Shear Stress, kPa	32	44	87
Strain Rate	1.25 mm/min		

KLEINFELDER

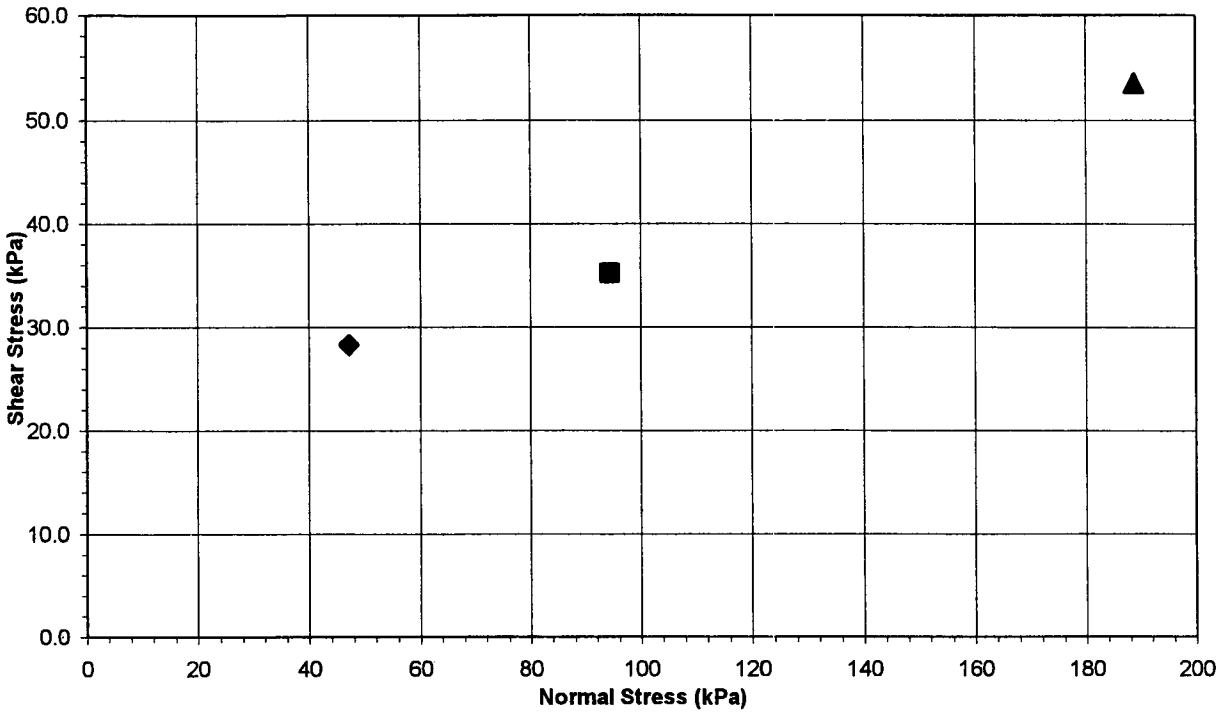
Project No. 35-8163-05

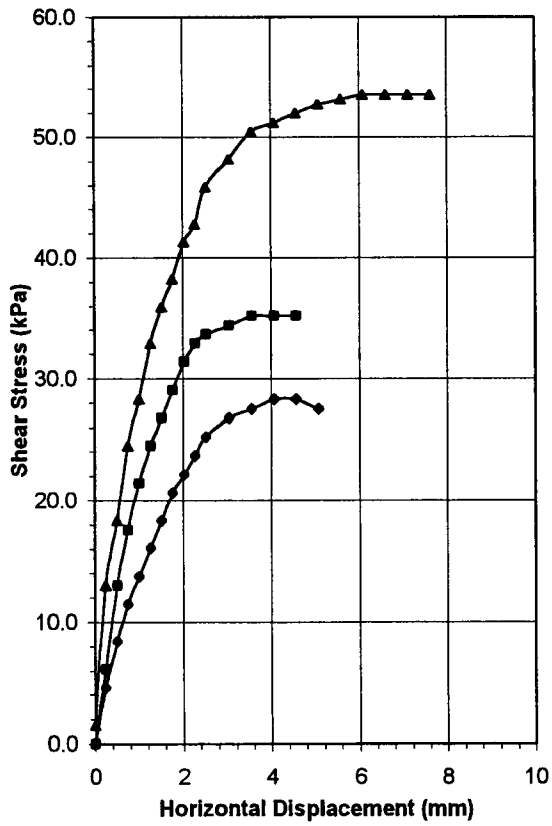
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1018





Boring: WB-9-229	Depth: 3.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	14.3	13.1	14.5
Water Content, %	36.2	35.9	27.0
Normal Stress, kPa	47	94	189
Shear Stress, kPa	28	35	54
Strain Rate	1.25 mm/min		

KLEINFELDER

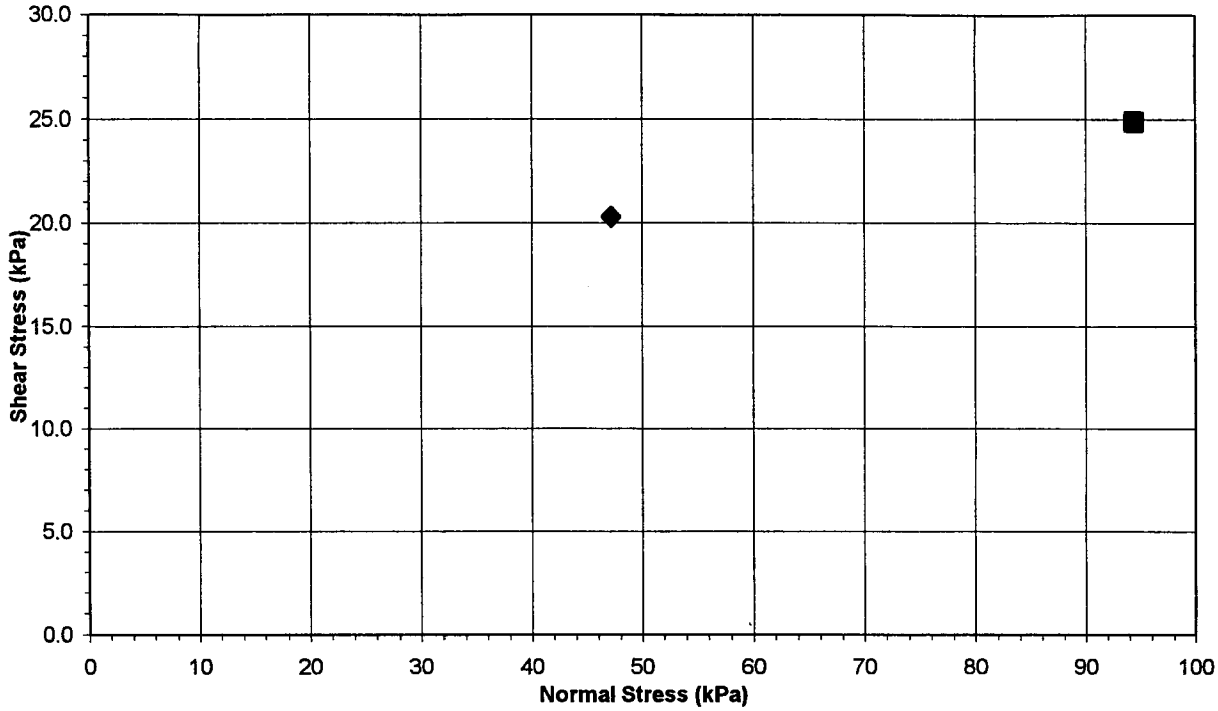
Project No. 35-8163-05

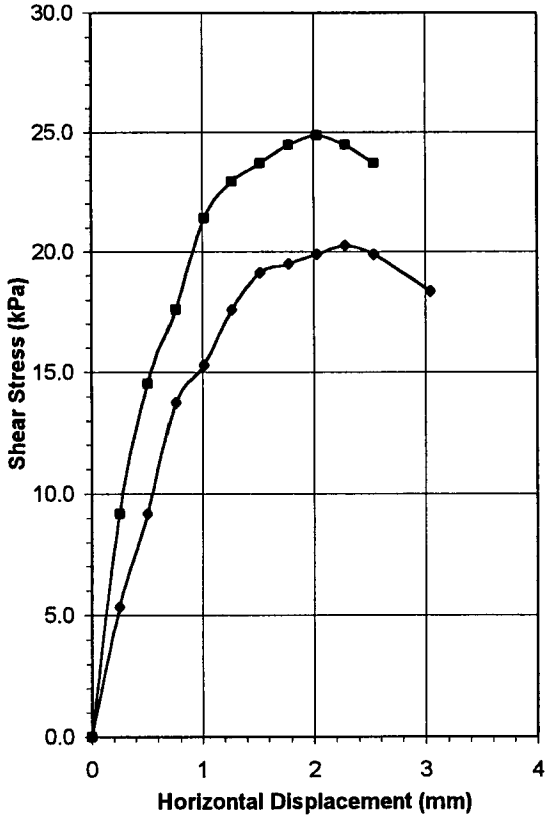
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1019





Boring: WB-18-218	Depth: 4.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	
Diameter, mm	63	63	
Dry Density, KN/m^3	13.2	13.5	
Water Content, %	37.8	36.7	
Normal Stress, kPa	47	94	
Shear Stress, kPa	20	25	
Strain Rate	1.25 mm/min		

KLEINFELDER

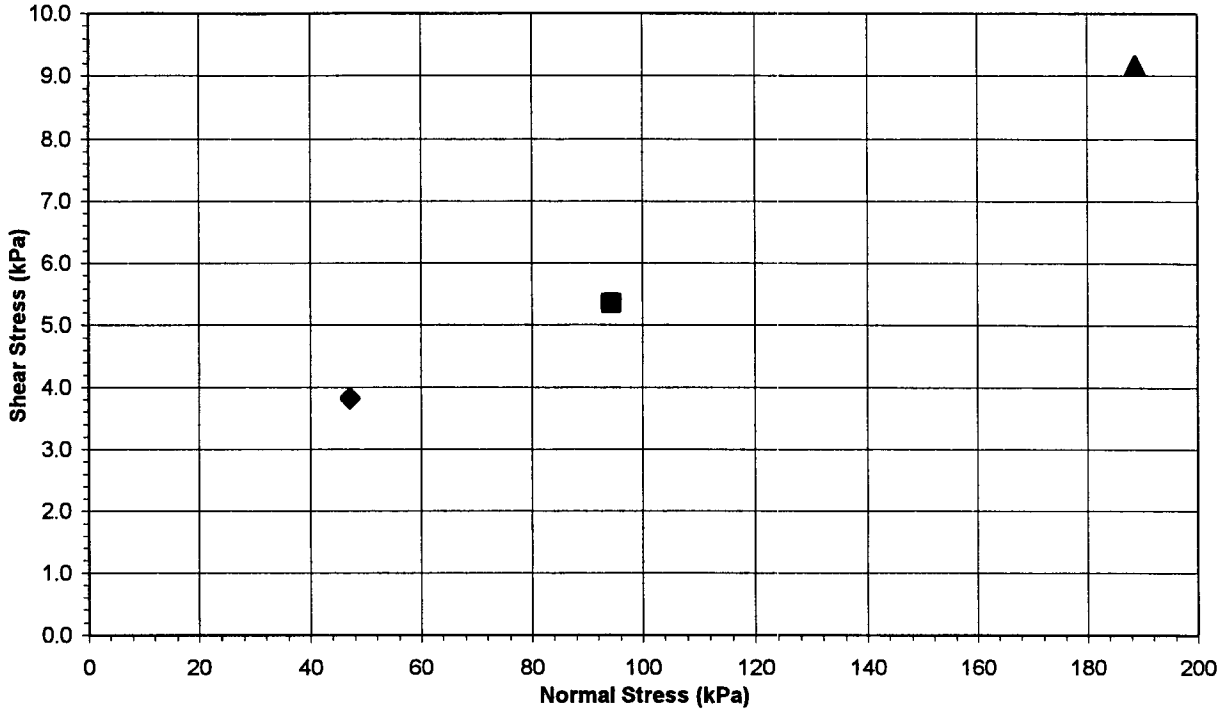
Project No. 35-8163-05

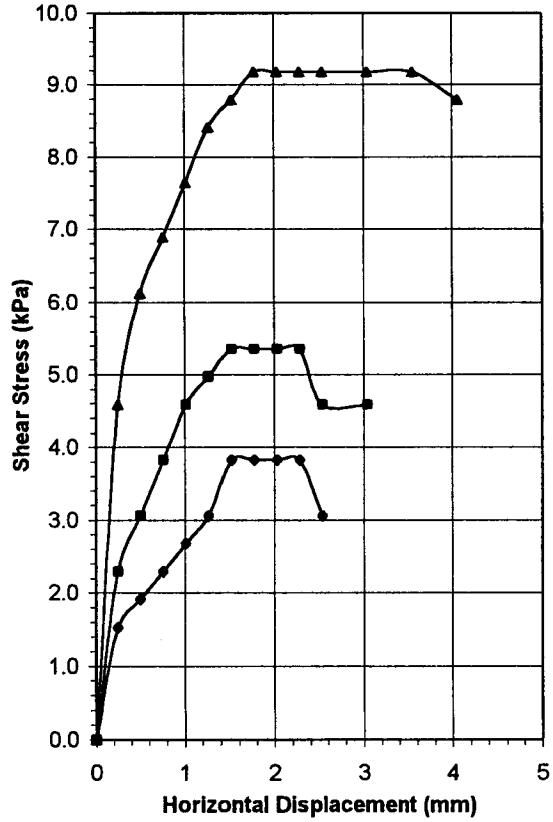
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1020





Boring: RB-360	Depth: 7.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	11.7	12.0	12.2
Water Content, %	43.1	40.2	41.7
Normal Stress, kPa	47	94	189
Shear Stress, kPa	4	5	9
Strain Rate	1.25 mm/min		

KLEINFELDER

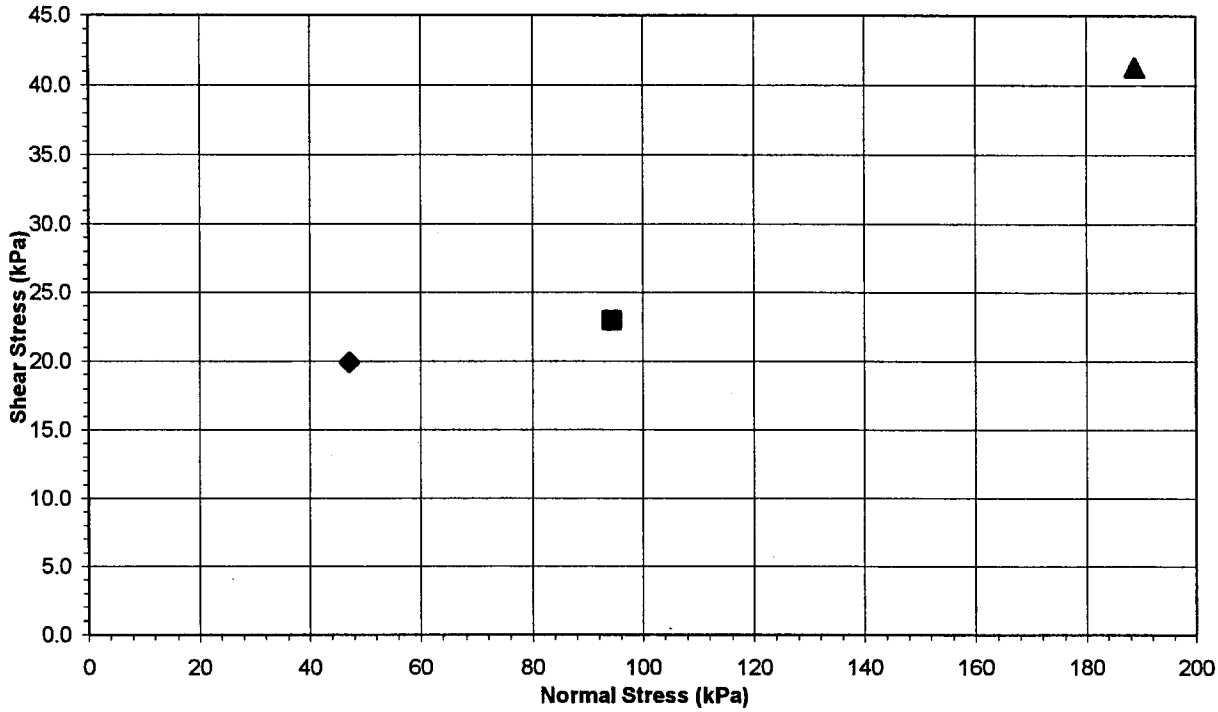
Project No. 35-8163-05

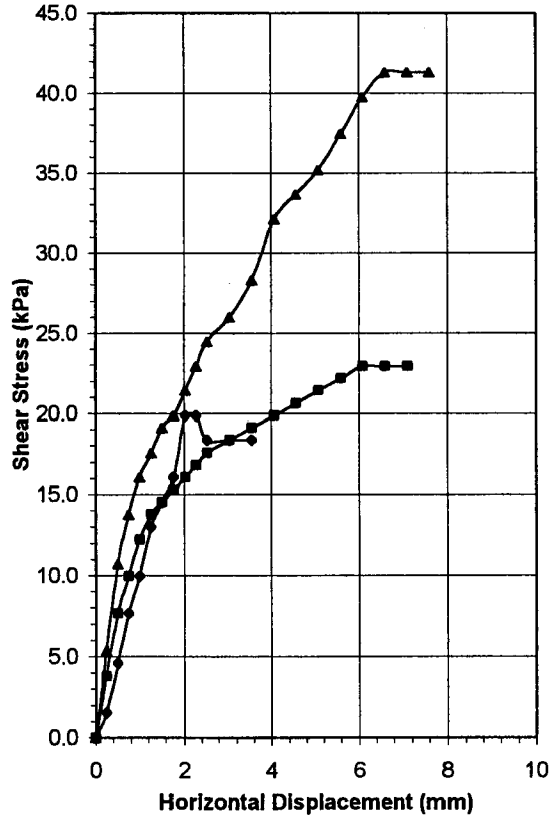
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1021





Boring: RB-364	Depth: 4.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	12.1	12.2	12.1
Water Content, %	41.0	42.3	41.3
Normal Stress, kPa	47	94	189
Shear Stress, kPa	20	23	41
Strain Rate	1.25 mm/min		

KLEINFELDER

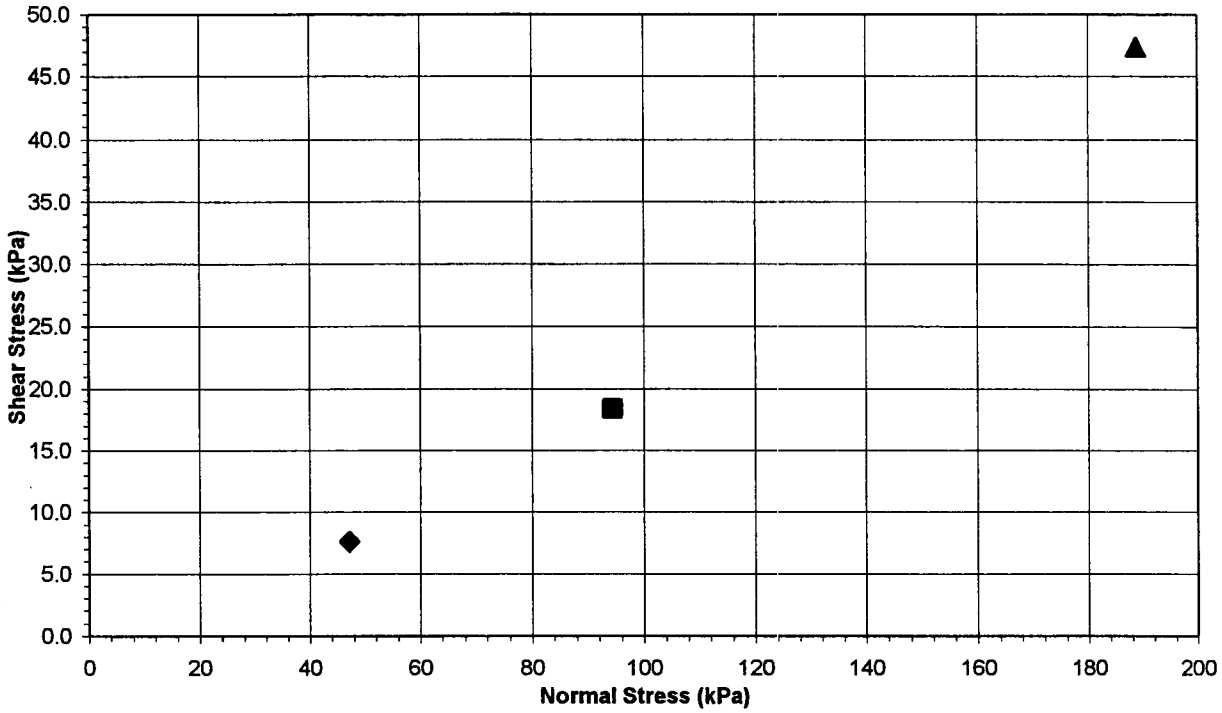
Project No. 35-8163-05

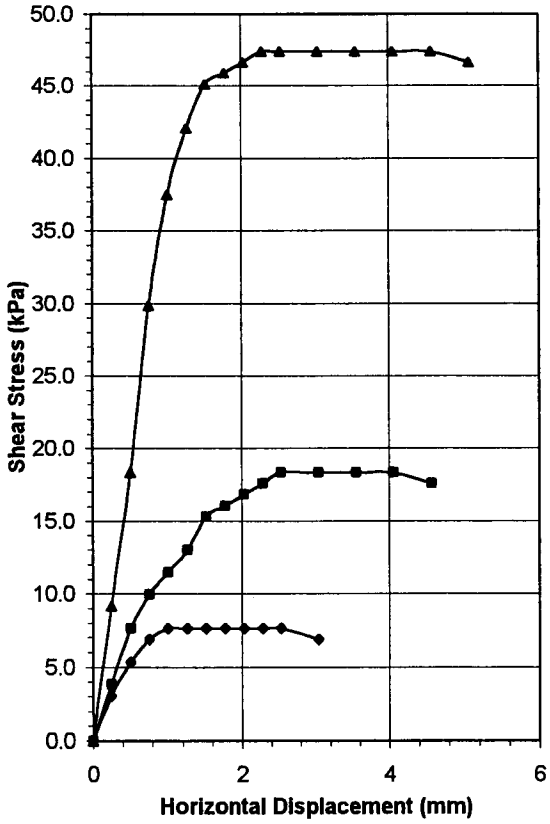
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1022





Boring: RB-371	Depth: 3.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	13.7	13.2	12.8
Water Content, %	35.0	35.7	37.3
Normal Stress, kPa	47	94	189
Shear Stress, kPa	8	18	47
Strain Rate	1.25 mm/min		

KLEINFELDER

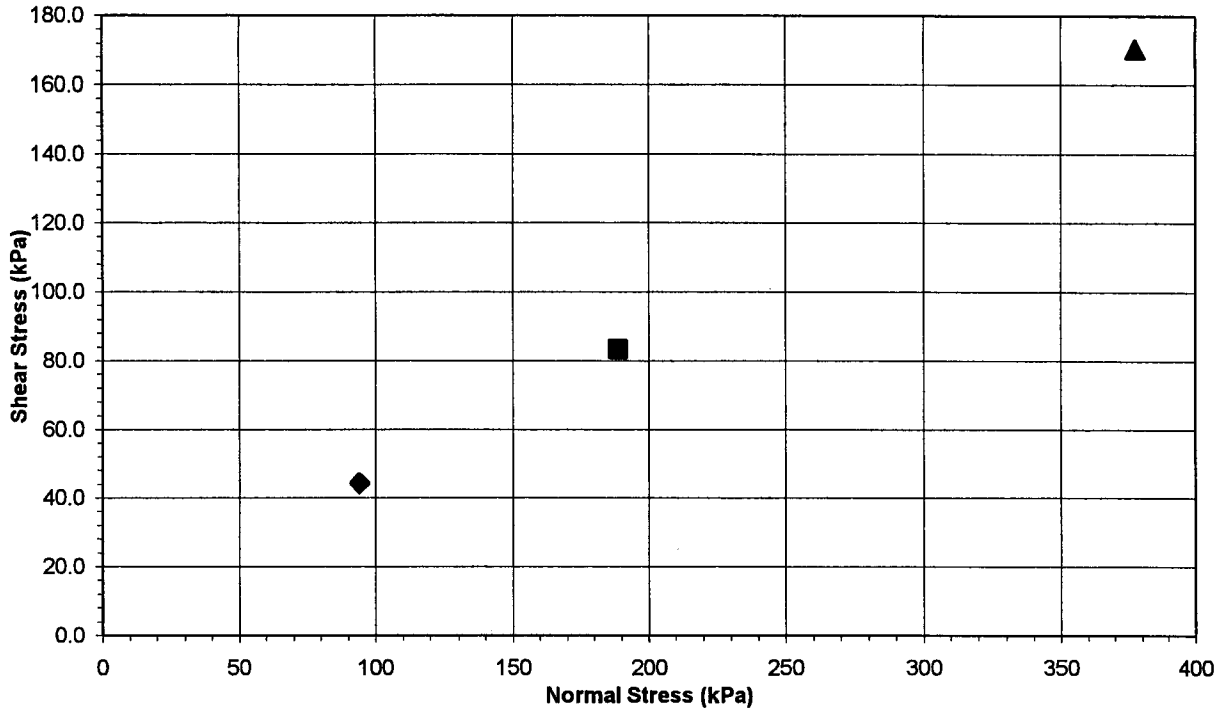
Project No. 35-8163-05

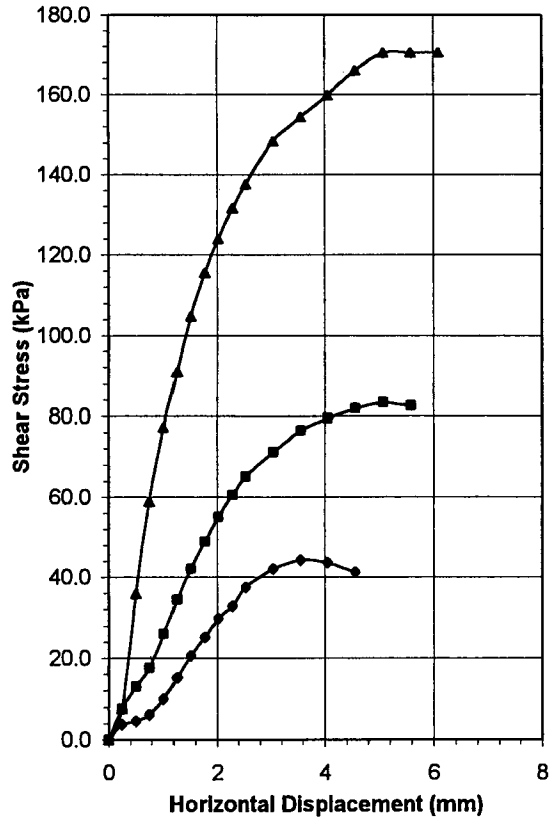
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1023





Boring: RB-373	Depth: 10.7 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	16.2	15.6	16.1
Water Content, %	23.6	24.2	22.8
Normal Stress, kPa	94	189	378
Shear Stress, kPa	44	83	171
Strain Rate	1.25 mm/min		

KLEINFELDER

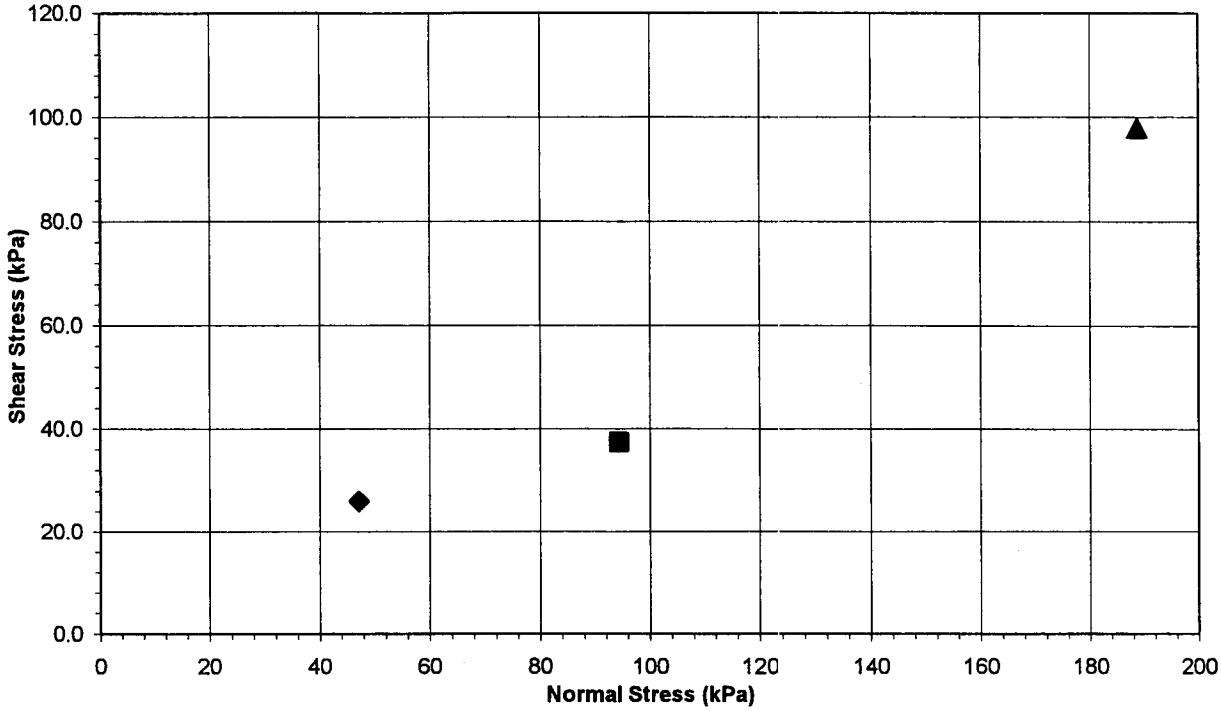
Project No. 35-8163-05

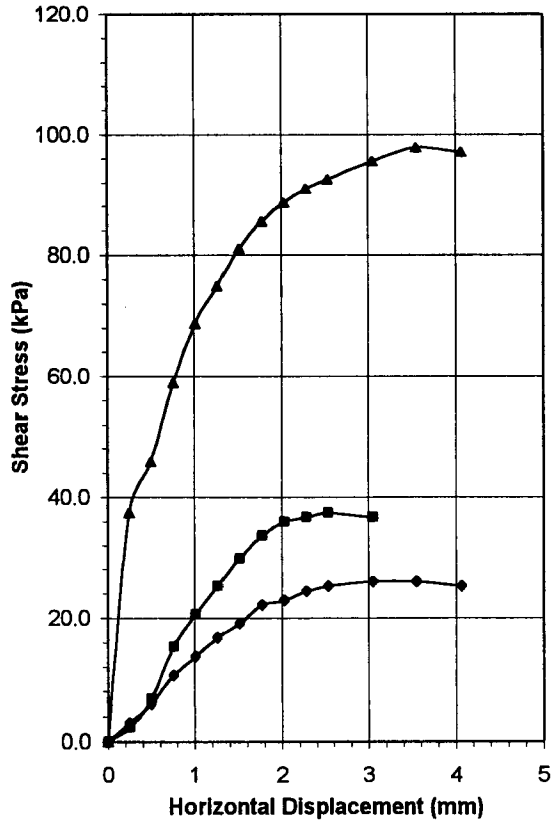
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1024





Boring: RB-376	Depth: 6.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	14.0	13.8	13.9
Water Content, %	33.4	33.9	27.7
Normal Stress, kPa	47	94	189
Shear Stress, kPa	26	37	98
Strain Rate	1.25 mm/min		

KLEINFELDER

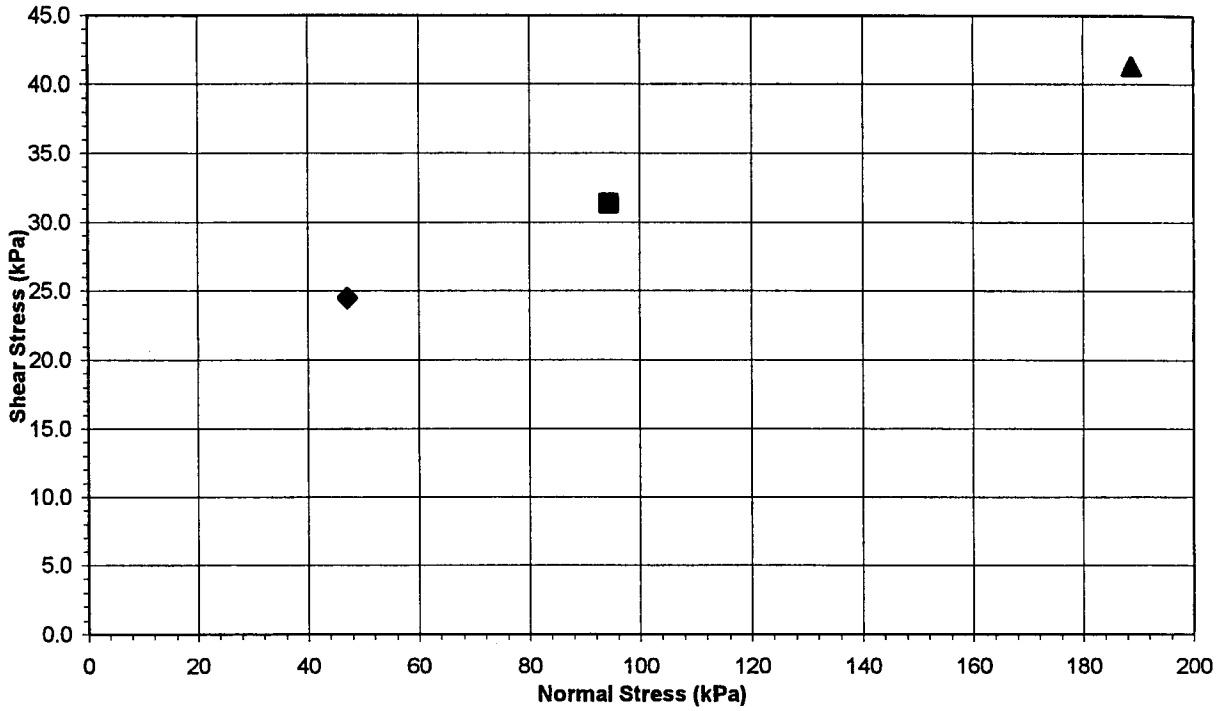
Project No. 35-8163-05

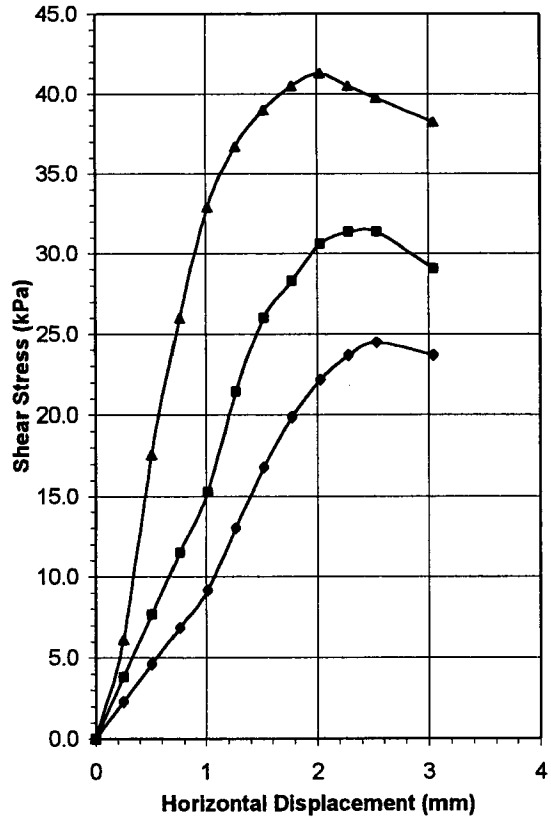
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1025





Boring: RB-379	Depth: 4.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	14.3	14.3	14.5
Water Content, %	32.6	32.5	32.0
Normal Stress, kPa	47	94	189
Shear Stress, kPa	24	31	41
Strain Rate	1.25 mm/min		

KLEINFELDER

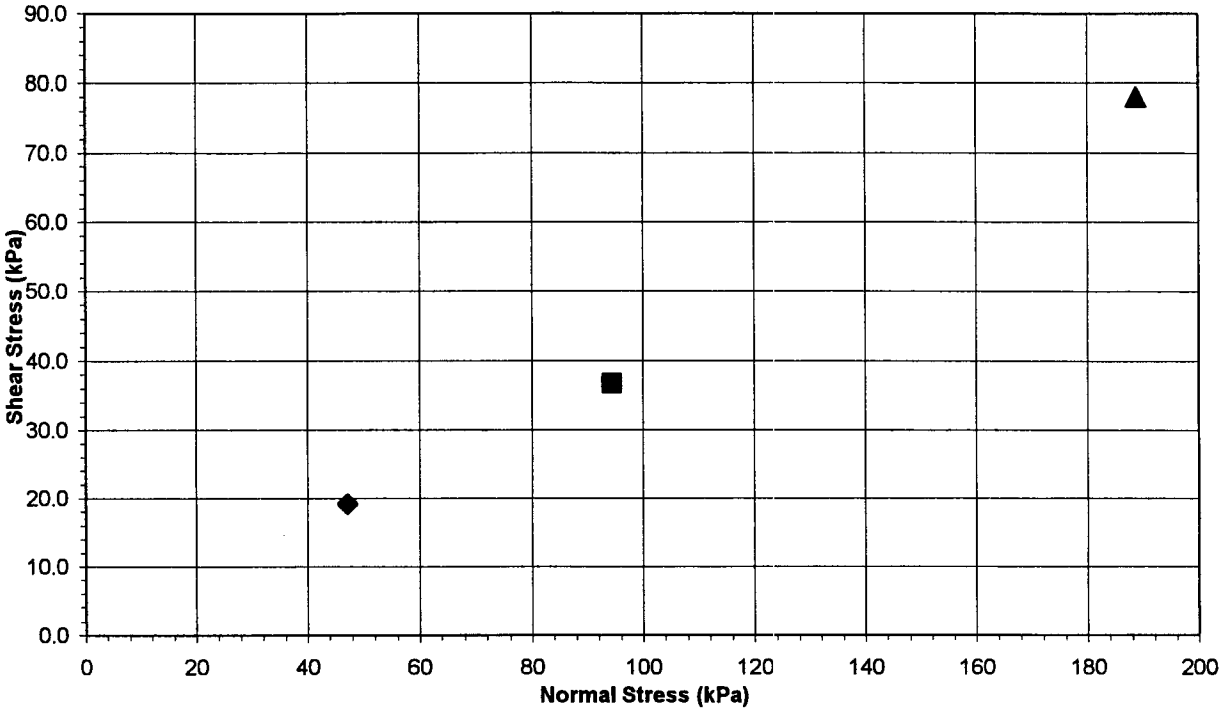
Project No. 35-8163-05

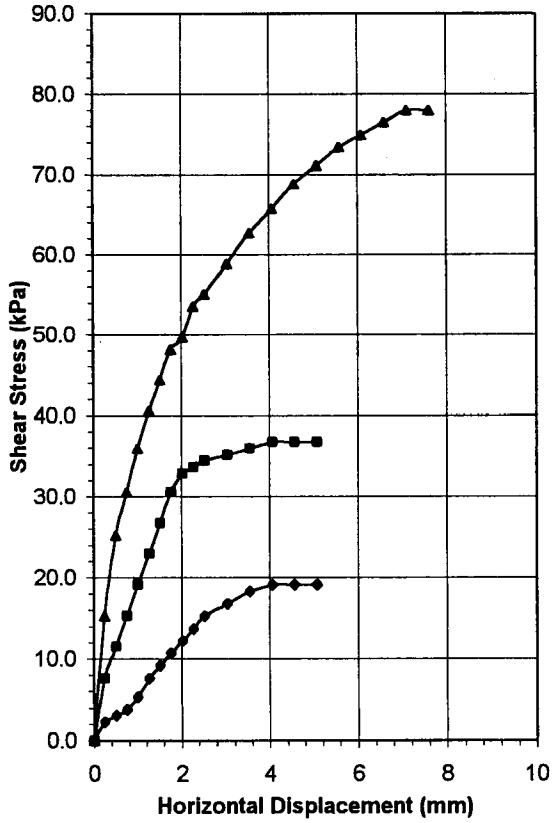
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1026





Boring: RB-382	Depth: 1.5 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	14.5	14.7	14.6
Water Content, %	27.4	25.5	25.4
Normal Stress, kPa	47	94	189
Shear Stress, kPa	19	37	78
Strain Rate	1.25 mm/min		

KLEINFELDER

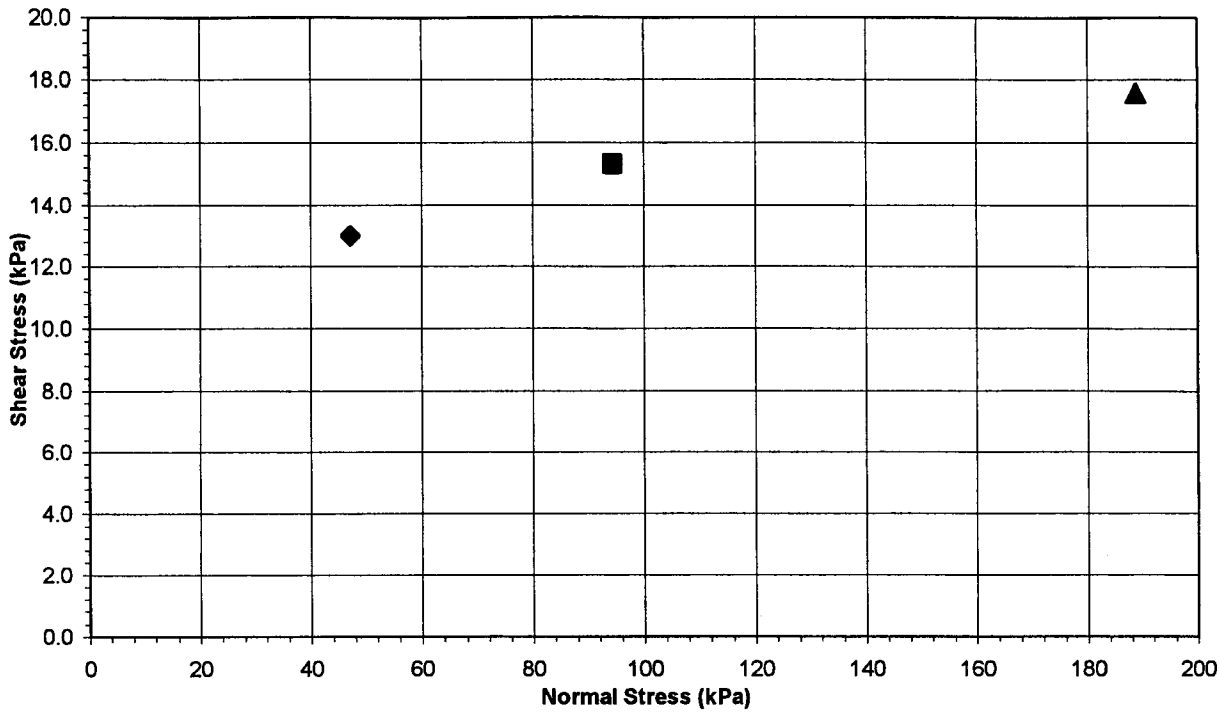
Project No. 35-8163-05

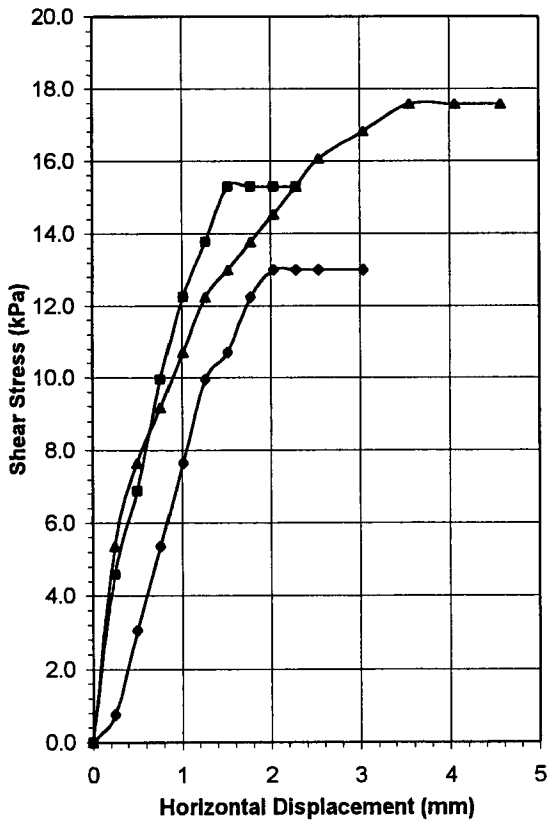
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1027





Boring: RB-383	Depth: 6.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	10.9	10.9	11.7
Water Content, %	53.2	51.5	45.9
Normal Stress, kPa	47	94	189
Shear Stress, kPa	13	15	18
Strain Rate	1.25 mm/min		

KLEINFELDER

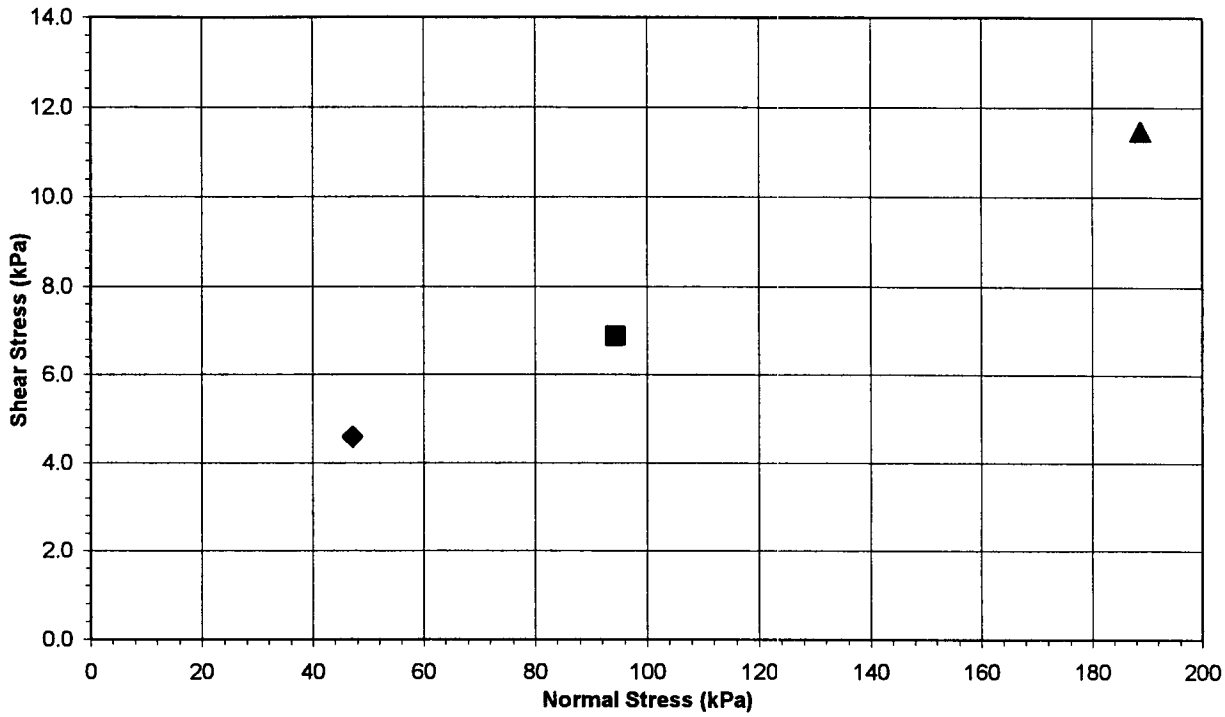
Project No. 35-8163-05

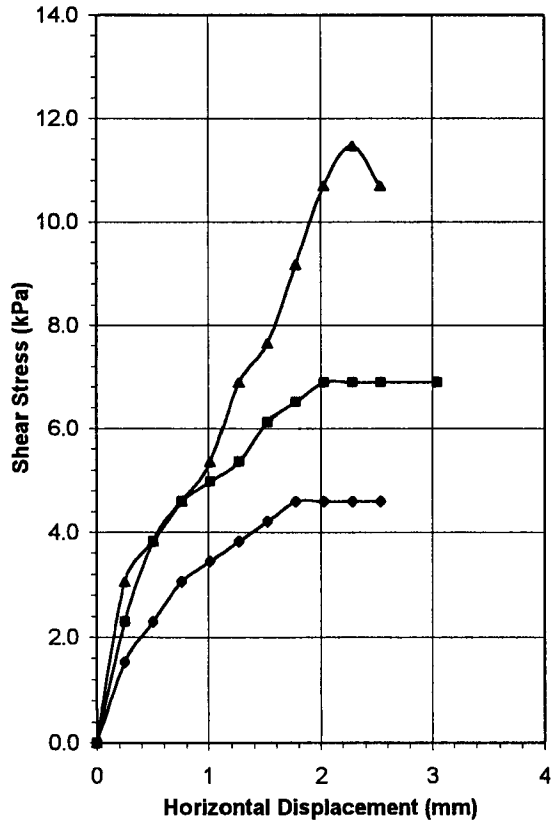
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1028





Boring: RB-384	Depth: 7.6 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	13.1	13.0	13.2
Water Content, %	40.8	41.4	38.0
Normal Stress, kPa	47	94	189
Shear Stress, kPa	5	7	11
Strain Rate	1.25 mm/min		

KLEINFELDER

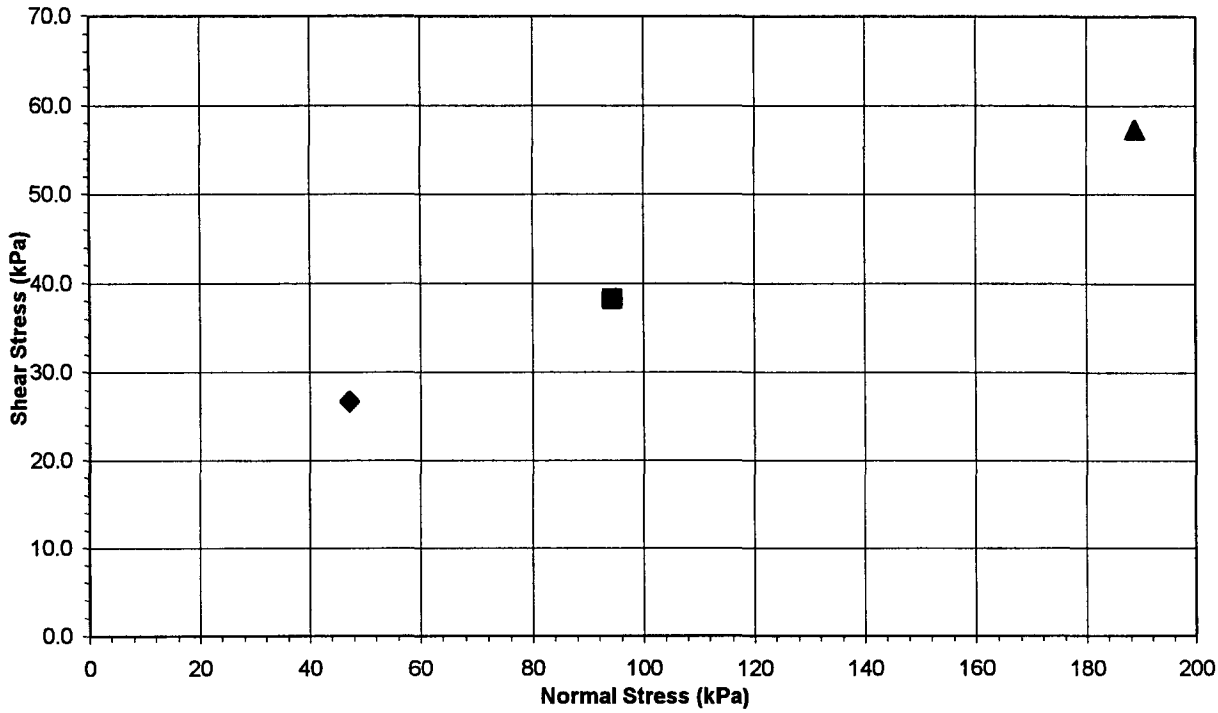
Project No. 35-8163-05

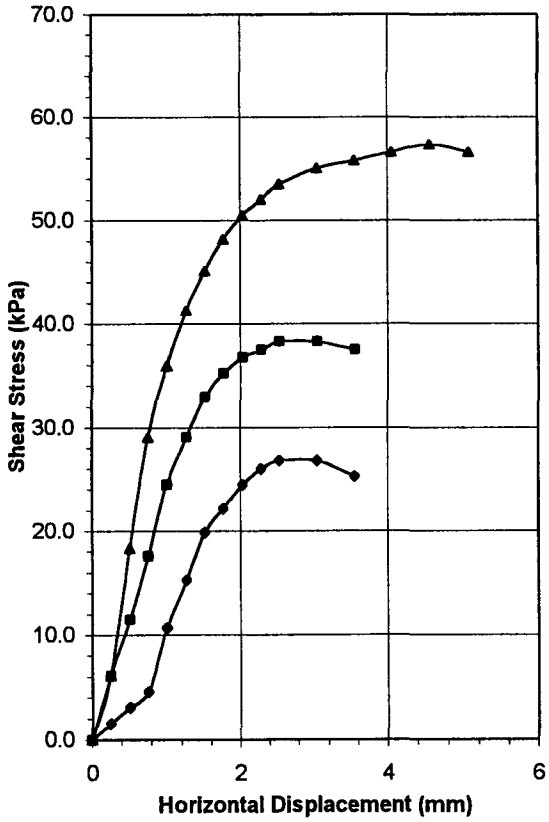
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1029





Boring: RB-386	Depth: 10.7 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	14.7	14.9	14.9
Water Content, %	29.3	28.3	27.2
Normal Stress, kPa	47	94	189
Shear Stress, kPa	27	38	57
Strain Rate	1.25 mm/min		

KLEINFELDER

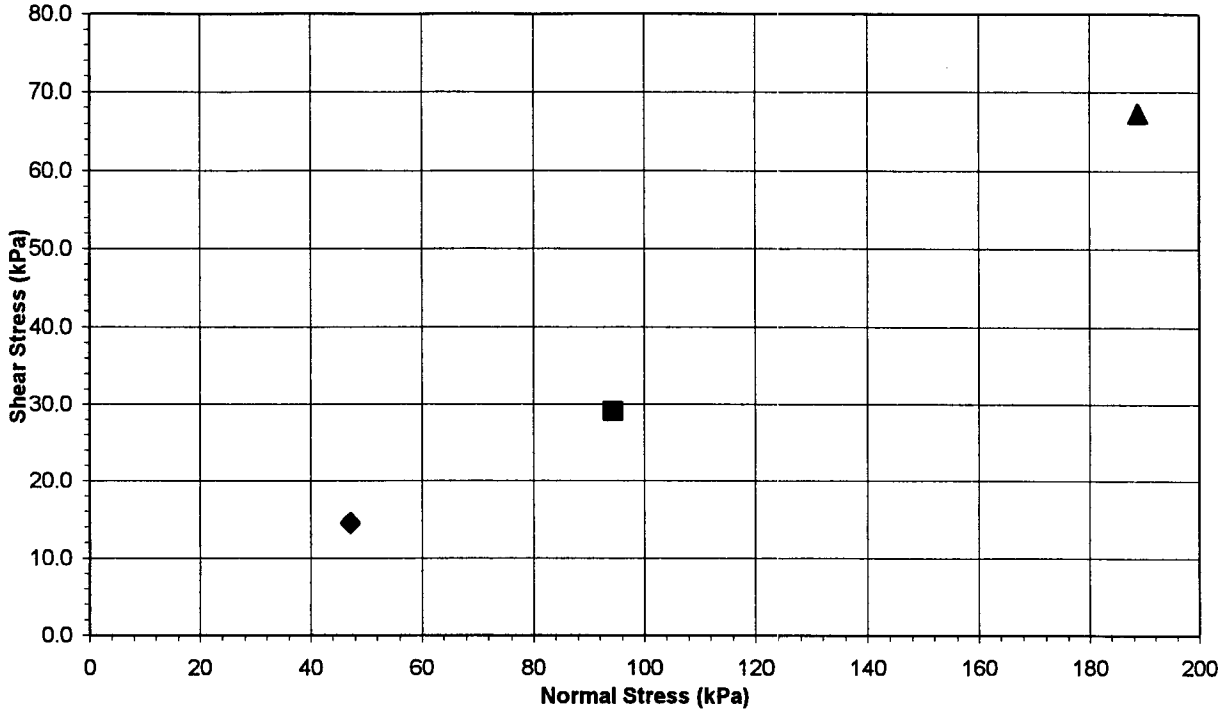
Project No. 35-8163-05

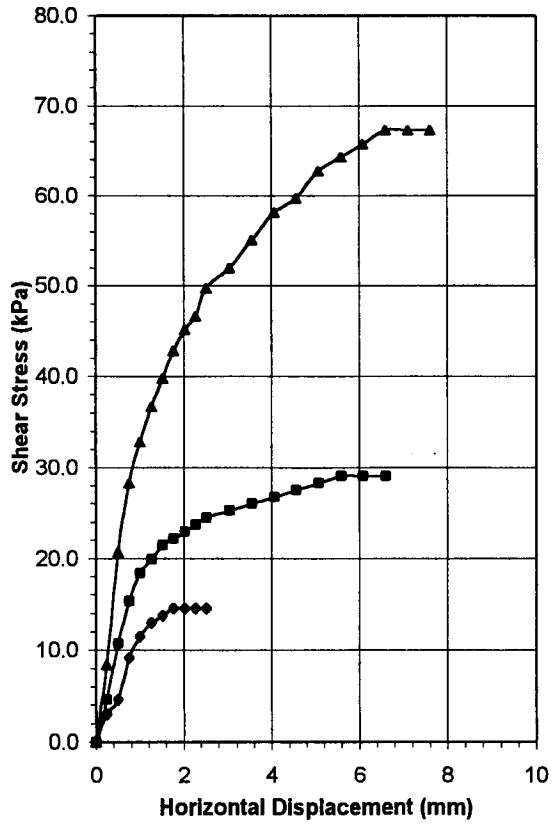
Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE

K-1030





Boring: RB-393	Depth: 3.1 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	11.8	11.8	12.2
Water Content, %	44.8	45.1	40.5
Normal Stress, kPa	47	94	189
Shear Stress, kPa	15	29	67
Strain Rate	1.25 mm/min		

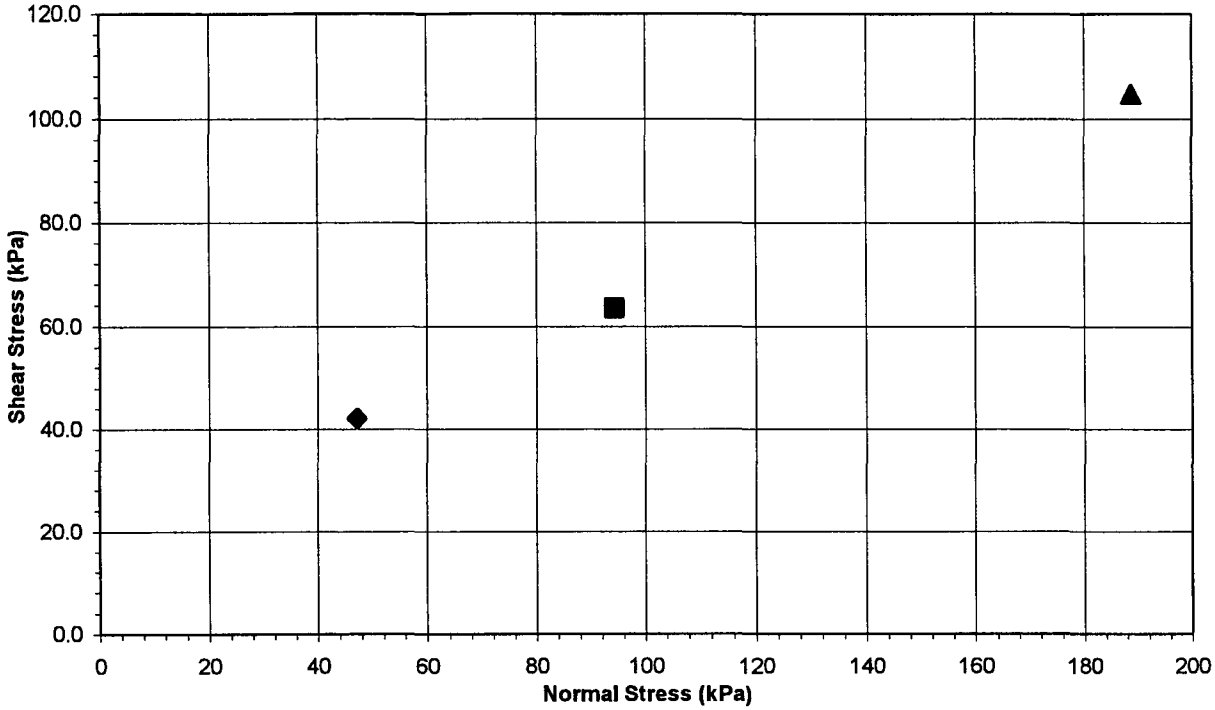
KLEINFELDER

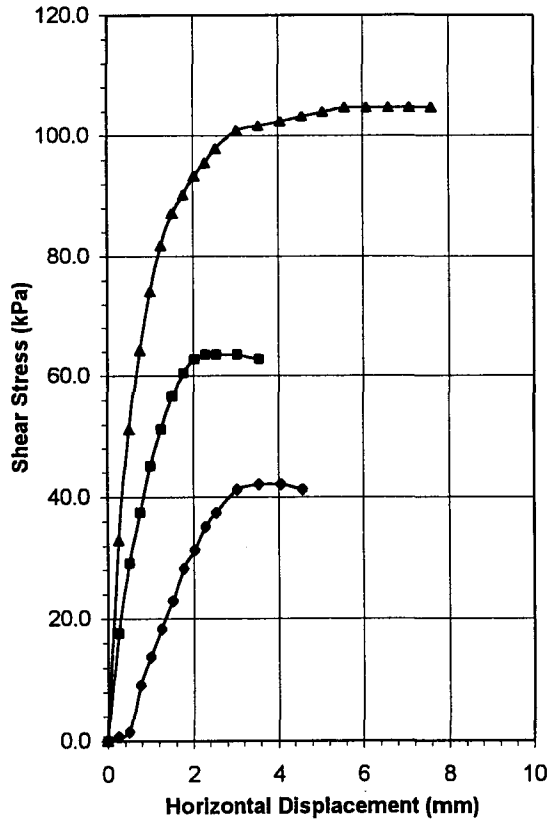
Project No. 35-8163-05

Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE
K-1031
A





Boring: RB-393	Depth: 15.2 m
Type of Test::	Unconsolidated-Undrained

Test No. (Symbol)	1	2	3
Sample Type	Undisturbed		
Height, mm	20	20	20
Diameter, mm	63	63	63
Dry Density, KN/m^3	15.6	15.6	15.5
Water Content, %	22.6	23.5	23.3
Normal Stress, kPa	47	94	189
Shear Stress, kPa	42	63	105
Strain Rate	1.25 mm/min		

KLEINFELDER

Project No. 35-8163-05

Legacy Highway - Peferred Alternative
I-215 to I-15/US 89 Interchange

DIRECT SHEAR TEST

PLATE
K-1031
B

pH, RESISTIVITY, AND SOLUBLE SULFATE TEST

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: March 1, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: May 5, 2000

Lab Sample ID:
L41084-01A

Field Sample ID:
SB-1-243 @ 4-6'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	5/8/00	9045C	0	**7.70**	
Resistivity	ohm-cm	5/9/00	2510B	0	**2,800**	*
Sulfate	mg/kg	5/9/00	375.4	5.0	**35**	*

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: May 11, 2000

PLATE K-1032

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 23, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-01A

Field Sample ID:
SB-2-247 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.00**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,300**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**48**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

Page 1 of 1

PLATE K-1033

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 21, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-02A

Field Sample ID:
SB-2-248 @ 17'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.00**	
Resistivity	ohm-cm	3/3/00	2510B	0	**1,900**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**35**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1034

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 24, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-03A

Field Sample ID:
SB-3-249 @ 9.5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.20**	
Resistivity	ohm-cm	3/3/00	2510B	0	**1,500**	*
Sulfate	mg/kg	3/6/00	375.4	62	< 62	*
						*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

Page 1 of 1

PLATE K-1035

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 28, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-04A

Field Sample ID:
SB-4-251 @ 10'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.90**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,200**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**25**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1036

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: February 22, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: April 14, 2000

Lab Sample ID:
L40795-04A

Field Sample ID:
SB-5-297 @ 5-7'

53 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Free (888) 263-8686
Fax (801) 263-8687

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	4/17/00	9045C	0	**8.70**	
Resistivity	ohm-cm	4/17/00	2510B	0	**170**	*
Sulfate	mg/kg	4/18/00	375.4	5.0	**520**	*

* Analysis is performed on a 1:1 DI water extract for soils.

R - Reissue of previously generated report. Information has been added, updated, or revised. Information herein supersedes that of previously issued reports.

Released by: Rene D. Gi
Laboratory Supervisor

Report Date: May 23, 2000 Page 1 of 1

PLATE K-1037

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: March 13, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-03A

Field Sample ID:
SB-6-323 @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.40**	
Resistivity	ohm-cm	3/30/00	2510B	0	**160**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**700**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SDM
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1038

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 18, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-13A

Field Sample ID:
SB-8-253 #1B @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.90**	
Resistivity	ohm-cm	3/30/00	2510B	0	**380**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SBA
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1039

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: January 18, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-13A
Field Sample ID: **SB-8-253 #1B @ 5-7'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 50

Compound	Reporting Limit	Amount Detected	
Sulfate	250	< 250	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOA
Laboratory Supervisor

Report Date: April 5, 2000 Page 1 of 1

PLATE K-1040

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 19, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-01A

Field Sample ID:
SB-8-254 3B @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.40**	
Resistivity	ohm-cm	3/30/00	2510B	0	**2,000**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1041

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: January 19, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-01A
Field Sample ID: **SB-8-254 3B @ 5-7'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 25

Compound	Reporting Limit	Amount Detected	
Sulfate	120	< 120	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOLT
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1042

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax: (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 18, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-05A

Field Sample ID:
SB-9-298 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.00**	
Resistivity	ohm-cm	3/3/00	2510B	0	**250**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**160**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1043

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 18, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-06A

Field Sample ID:
SB-9-299 @ 0-15'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.40**	
Resistivity	ohm-cm	3/3/00	2510B	0	**3,000**	*
Sulfate	mg/kg	3/6/00	375.4	62	< 62	*
						*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1044

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
l Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 28, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-07A

Field Sample ID:
SB-10-300 @ 10'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.70**	
Resistivity	ohm-cm	3/3/00	2510B	0	**140**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**500**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1045

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 14, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-08A

Field Sample ID:
SB-10-303 @ 10'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.80**	
Resistivity	ohm-cm	3/3/00	2510B	0	**220**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**480**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1046

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 26, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-11A

Field Sample ID:
SB-11-259 @ 4-6'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**9.10**	
Resistivity	ohm-cm	3/30/00	2510B	0	**180**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**500**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

Page 1 of 1

PLATE K-1047

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: January 26, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-09A

Field Sample ID:
SB-11-262 @ 5'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.40**	
Resistivity	ohm-cm	3/3/00	2510B	0	**380**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**220**	*

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1048

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 31, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-07A

Field Sample ID:
SB-12-263 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.50**	
Resistivity	ohm-cm	3/30/00	2510B	0	**4,900**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**8.0**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1049

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 22, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-10A

Field Sample ID:
SB-12-265 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.00**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,600**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**25**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1050

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
l Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 27, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-11A

Field Sample ID:
SB-13-304 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.50**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,000**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**75**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

Page 1 of 1

PLATE K-1051

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: January 9, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-12A

Field Sample ID:
SB-13-308 @ 5'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.20**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,900**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**65**	*

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1052

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: January 6, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-13A

Field Sample ID:
SB-14-309 @ 9'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**7.80**	
Resistivity	ohm-cm	3/3/00	2510B	0	**1,200**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**90**	*

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1053

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 20, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-14A

Field Sample ID:
SB-14-313 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.30**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,400**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**95**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1054

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
l Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 4, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-15A

Field Sample ID:
SB-15-266 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.90**	
Resistivity	ohm-cm	3/3/00	2510B	0	**610**	*
Sulfate	mg/kg	3/6/00	375.4	500	< 500	*
						*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1055

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 14, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-16A

Field Sample ID:
SB-15-267 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.20**	
Resistivity	ohm-cm	3/3/00	2510B	0	**610**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**70**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1056

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 4, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-17A

Field Sample ID:
SB-16-266 @ 5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**9.00**	
Resistivity	ohm-cm	3/3/00	2510B	0	**2,500**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**22**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1057

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 15, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-18A

Field Sample ID:
SB-17-271 @ 4'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.80**	
Resistivity	ohm-cm	3/3/00	2510B	0	**3,600**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**29**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1058

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: January 4, 2000
Project: Legacy Highway

Contact: Curt Christensen
Date Received: March 2, 2000

Lab Sample ID:
L40295-19A

Field Sample ID:
SB-18-272 @ 15'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/3/00	9045C	0	**8.40**	
Resistivity	ohm-cm	3/3/00	2510B	0	**450**	*
Sulfate	mg/kg	3/6/00	375.4	5.0	**480**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1059

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 1, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-04A

Field Sample ID:
SB-19-276 bag 1 @ 5-6'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.80**	
Resistivity	ohm-cm	3/30/00	2510B	0	**1,400**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**180**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1060

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax: (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 17, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-15A

Field Sample ID:
SB-22-288 #3A @ 8-10'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.40**	
Resistivity	ohm-cm	3/30/00	2510B	0	**3,900**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**23**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1061

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: March 16, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: April 14, 2000

Lab Sample ID:
L40795-05A

Field Sample ID:
SB-24-255 @ 5-7'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	4/17/00	9045C	0	**7.80**	
Resistivity	ohm-cm	4/17/00	2510B	0	**4,800**	*
Sulfate	mg/kg	4/18/00	375.4	25	< 25	*+

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

+ The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.
R - Reissue of previously generated report. Information has been added, updated, or revised. Information herein supersedes that of previously issued reports.

Released by: _____
Laboratory Supervisor

Report Date: May 23, 2000 Page 1 of 1

PLATE K-1062

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

163 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
1 Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 9, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-02A

Field Sample ID:
SB-24-258 @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**7.50**	
Resistivity	ohm-cm	3/30/00	2510B	0	**6,100**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

Page 1 of 1

PLATE K-1063

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: February 9, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-02A
Field Sample ID: **SB-24-258 @ 5-7'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 25

Compound	Reporting Limit	Amount Detected	
Sulfate	120	< 120	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1064

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
l Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 8, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-08A

Field Sample ID:
SB-25-334 @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**7.10**	
Resistivity	ohm-cm	3/30/00	2510B	0	**6,100**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**150**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: Scott
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1065

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Client: Kleinfelder-SLC
Date Sampled: March 13, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-10A

Field Sample ID:
SB-25-336 @ 10-12'

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**7.50**	
Resistivity	ohm-cm	3/30/00	2510B	0	**6,100**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**150**	*

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1066

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: March 14, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-05A

Field Sample ID:
SB-26-337 @ 4-6'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.30**	
Resistivity	ohm-cm	3/30/00	2510B	0	**2,800**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SDH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1067

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: March 14, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-05A
Field Sample ID: **SB-26-337 @ 4-6'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results — **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 25

Compound	Reporting Limit	Amount Detected	
Sulfate	120	< 120	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOM
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1068

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 9, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: April 14, 2000

Lab Sample ID:
L40795-03A

Field Sample ID:
SB-27-345 @ 9-11'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	4/17/00	9045C	0	**7.40**	
Resistivity	ohm-cm	4/17/00	2510B	0	**16,000**	*
Sulfate	mg/kg	4/18/00	375.4	5.0	**35**	*

* Analysis is performed on a 1:1 DI water extract for soils.

R - Reissue of previously generated report. Information has been added, updated, or revised. Information herein supersedes that of previously issued reports.

Released by: Paul D. Gi
Laboratory Supervisor

Report Date: May 23, 2000

Page 1 of 1

PLATE K-1069

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: March 31, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-06A

Field Sample ID:
SB-28-346 @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.70**	
Resistivity	ohm-cm	3/30/00	2510B	0	**3,300**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: Sbt
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1070

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

.63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
l Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: March 31, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-06A
Field Sample ID: **SB-28-346 @ 5-7'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 2.5

Compound	Reporting Limit	Amount Detected	
Sulfate	12	< 12	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOH
Laboratory Supervisor

Report Date: April 5, 2000 Page 1 of 1

PLATE K-1071

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 10, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-12A

Field Sample ID:
SB-28-347 #2B @ 5-7'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.40**	
Resistivity	ohm-cm	3/30/00	2510B	0	**3,200**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOM
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1072

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

ANALYTICAL REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Collected: February 10, 2000
Received: March 29, 2000

Contact: Chris Garris
Analyzed: March 30, 2000
Extracted: March 30, 2000

Analysis Requested: 375.4

Lab Sample ID: L40594-12A
Field Sample ID: **SB-28-347 #2B @ 5-7'**
Site ID: Legacy Parkway/35-8163-05.005

Analytical Results **Sulfate in soils**

Units = mg/kg
Final Dilution Factor: 100

Compound	Reporting Limit	Amount Detected	
Sulfate	500	< 500	*

* The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1073

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: March 13, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-09A

Field Sample ID:
SB-29-348 @ 7-9'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**8.60**	
Resistivity	ohm-cm	3/30/00	2510B	0	**1,900**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	< 5.0	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1074

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: February 6, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: March 29, 2000

Lab Sample ID:
L40594-14A

Field Sample ID:
SB-30-352 @ 4-5.5'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	3/30/00	9045C	0	**7.60**	
Resistivity	ohm-cm	3/30/00	2510B	0	**3,400**	*
Sulfate	mg/kg	3/30/00	375.4	5.0	**120**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1075

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: April 3, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: April 14, 2000

Lab Sample ID:
L40795-01A

Field Sample ID:
SB-31-353 @ 4-6'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	4/17/00	9045C	0	**9.40**	
Resistivity	ohm-cm	4/17/00	2510B	0	**1,400**	*
Sulfate	mg/kg	4/18/00	375.4	250	< 250	*+

+ The reporting limits were raised due to sample matrix interference.
* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 21, 2000 Page 1 of 1

PLATE K-1076

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

63 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: April 21, 2000
Project: Legacy Parkway / 35-8163-05.005

Contact: Chris Garris
Date Received: May 9, 2000

Lab Sample ID:
L41117-01A

Field Sample ID:
SB-31-354 0-2' #1A

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	5/10/00	9045C	0	**8.70**	
Resistivity	ohm-cm	5/11/00	2510B	0	**260**	*
Sulfate	mg/kg	5/11/00	375.4	5.0	**320**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: May 15, 2000

PLATE K-1077

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

INORGANIC ANALYSIS REPORT

AMERICAN
WEST
ANALYTICAL
LABORATORIES

463 West 3600 South
Salt Lake City, Utah
84115

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687

Client: Kleinfelder-SLC
Date Sampled: March 30, 2000
Project: Legacy Parkway/35-8163-05.005

Contact: Chris Garris
Date Received: April 14, 2000

Lab Sample ID:
L40795-02A

Field Sample ID:
SB-31-356 @ 10-12'

Analytical Results	Units	Date Analyzed	Method Used	Reporting Limit	Amount Detected	
pH	pH units	4/17/00	9045C	0	**9.00**	
Resistivity	ohm-cm	4/17/00	2510B	0	**810**	*
Sulfate	mg/kg	4/18/00	375.4	5.0	**90**	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:

Laboratory Supervisor

Report Date: April 21, 2000

PLATE K-1078

This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40295
Project: Legacy Highway

Sample ID: L40295-01ADUP
Batch ID: R2352
Analysis Date: March 3, 2000

Resistivity in solids

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: ohm-cm									
Resistivity	2331	0	2342	0	0	0	0.471	5	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by:
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1079

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40295
Project: Legacy Highway

Sample ID: L40295-01ADUP Analysis Date: March 3, 2000 **pH**
Batch ID: R2351

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: pH units									
pH	7.97	0	7.99	0	0	0	0.251	10	

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1080

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40295
Project: Legacy Highway

Sample ID: LCS
Batch ID: 1136

Analysis Date: March 6, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	40	40	0	100	90	110			

Released by:

Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1081

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40295
Project: Legacy Highway

Sample ID: L40295-01ADUP
Batch ID: 1136
Analysis Date: March 6, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	50	0	47.5	0	0	0	5.13	20	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: March 9, 2000

PLATE K-1082

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40594
Project: Legacy Parkway/35-8163-05.005

Sample ID: LCS
Batch ID: R2996
Analysis Date: March 30, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	40	40	0	100	90	110			

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1083

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40594
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40591-02ADUP
Batch ID: R2998
Analysis Date: March 30, 2000

pH

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: pH units									
pH	9.12	0	9.13	0	0	0	0.11	10	

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1084

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40594
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40591-02ADUP
Batch ID: R2990
Analysis Date: March 30, 2000

Resistivity in solids

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: ohm-cm									
Resistivity	1175	0	1172	0	0	0	0.256	5	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1085

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40594
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40592-01ADUP
Batch ID: R2996
Analysis Date: March 30, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	37	0	38	0	0	0	2.67	20	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SDH
Laboratory Supervisor

Report Date: April 5, 2000

PLATE K-1086

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40795
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40794-01ADUP Analysis Date: April 17, 2000 **pH**
Batch ID: R3361

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: pH units									
pH	7.87	0	7.89	0	0	0	0.254	10	

Released by: _____
Laboratory Supervisor

Report Date: April 21, 2000

PLATE K-1087

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40795
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40794-01ADUP
Batch ID: 1563
Analysis Date: April 17, 2000

Resistivity in solids

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: ohm-cm									
Resistivity	4048	0	4032	0	0	0	0.396	5	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: April 21, 2000

PLATE K-1088

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L40795
Project: Legacy Parkway/35-8163-05.005

Sample ID: L40794-01ADUP
Batch ID: R3361
Analysis Date: April 18, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	< 5.0	0	0	0	0	0	0	20	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: Laboratory Supervisor

Report Date: April 21, 2000

PLATE K-1089

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41084
Project: Legacy Parkway/35-8163-05.005

Sample ID: L41085-01ADUP Analysis Date: May 8, 2000 **pH**
Batch ID: R3862

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: pH units									
pH	8.02	0	7.97	0	0	0	0.625	10	

Released by: _____
Laboratory Supervisor

Report Date: May 11, 2000

PLATE K-1090

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41084
Project: Legacy Parkway/35-8163-05.005

Sample ID: L41085-01ADUP
Batch ID: R3886
Analysis Date: May 9, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	< 5.0	0	0	0	0	0	0	20	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: _____
Laboratory Supervisor

Report Date: May 11, 2000

PLATE K-1091

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41084
Project: Legacy Parkway/35-8163-05.005

Sample ID: L41085-01ADUP
Batch ID: 1835
Analysis Date: May 9, 2000

Resistivity in solids

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: ohm-cm									
Resistivity	5139	0	5834	0	0	0	12.7	5	*

* Analysis is performed on a 1:1 DI water extract for soils.
* High RPD due to suspected sample inhomogeneity.

Released by: _____
Laboratory Supervisor

Report Date: May 11, 2000

PLATE K-1092

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41117
Project: Legacy Parkway / 35-8163-05.005

Sample ID: L41055-01BDUP Analysis Date: May 10, 2000 **pH**
Batch ID: R3922

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: pH units									
pH	7.6	0	7.6	0	0	0	0	10	

Released by: _____
Laboratory Supervisor

Report Date: May 15, 2000

PLATE K-1093

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41117
Project: Legacy Parkway / 35-8163-05.005

Sample ID: L41118-01ADUP
Batch ID: 1874
Analysis Date: May 11, 2000

Resistivity in solids

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: ohm-cm									
Resistivity	2710	0	0	0	0	0	1.36	5	*

Released by: SOut
Laboratory Supervisor

Report Date: May 15, 2000

PLATE K-1094

QC SUMMARY REPORT

CLIENT: Kleinfelder-SLC
Work Order: L41117
Project: Legacy Parkway / 35-8163-05.005

Sample ID: L41118-01ADUP
Batch ID: 1874
Analysis Date: May 11, 2000

Sulfate in soils

Analyte	Result	Amount Spiked	Original Amount	%REC	Low Limit	Upper Limit	%RPD	RPD Limit	Qualifiers
Units: mg/kg									
Sulfate	20	0	23	0	0	0	14	20	*

* Analysis is performed on a 1:1 DI water extract for soils.

Released by: SOtt
Laboratory Supervisor

Report Date: May 15, 2000

PLATE K-1095

LABORATORY TEST SUMMARY

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 1-243	SB- 1-243	SB- 1-243	SB- 1-243	SB- 1-243	SB- 1-243	SB- 1-246	SB- 1-246		
SAMPLE DEPTH (m)	1.22	4.57	10.36	13.41	24.38	30.18	12.19	22.86		
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB		
STATION	58+220.478	58+220.478	58+220.478	58+220.478	58+220.478	58+220.478	58+294.659	58+294.659		
OFFSET (RT or LT)	1.99 RT	1.99 RT	1.99 RT	1.99 RT	1.99 RT	1.99 RT	4.26 RT	4.26 RT		
ELEVATION (m)	1284.48	1284.48	1284.48	1284.48	1284.48	1284.48	1285.66	1285.66		
SAMPLE TYPE	P	P	P	P	P	P	SH	SH		
DATE SAMPLED	3/1/2000	3/1/2000	3/1/2000	3/1/2000	3/1/2000	3/1/2000	2/21/2000	2/21/2000		
SOIL CLASSIFICATION (USCS)	CL	MH		CL	ML	CH	ML	CL		
GROUP CLASSIFICATION (AASHTO)					A-2-4	A-7-6	A-4			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)							99			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		69		33			48	34		
WET UNIT WEIGHT (kN/m^3)		15.6		19.3			18.4	18.9		
DRY UNIT WEIGHT (kN/m^3)		9.2		14.5			12.4	14.2		
SPECIFIC GRAVITY		2.84					2.80	2.60		
ATTERBERG LIMITS										
LIQUID LIMIT, LL		51		44			NP	37		
PLASTICITY INDEX, PI		20		23			NP	17		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		40					66	170		
TORVANE (kPa)	53	24	29	57	38	77	38	77		
CORROSION										
pH	7.7									
RESISTIVITY (ohm-cm)	2800									
WATER SOLUBLE SULFATE (ppm)	35									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1096

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 2-247	SB- 2-247	SB- 2-247	SB- 2-247	SB- 2-247	SB- 2-247	SB- 2-247	SB- 2-247		
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72	18.29	24.99	30.48		
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE		
STATION	6002+221.649	6002+221.649	6002+221.649	6002+221.649	6002+221.649	6002+221.649	6002+221.649	6002+221.649		
OFFSET (RT or LT)	19.91 LT	19.91 LT	19.91 LT	19.91 LT	19.91 LT	19.91 LT	19.91 LT	19.91 LT		
ELEVATION (m)	1286.87	1286.87	1286.87	1286.87	1286.87	1286.87	1286.87	1286.87		
SAMPLE TYPE	SPT	SH	SH	SH	SH	SH	SH	SH		
DATE SAMPLED	1/23/2000	1/23/2000	1/23/2000	1/23/2000	1/23/2000	1/23/2000	1/23/2000	1/23/2000		
SOIL CLASSIFICATION (USCS)	CL	CL	CL		CL	CL				
GROUP CLASSIFICATION (AASHTO)		A-6				A-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)			46							
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		34	48		23	28				
WET UNIT WEIGHT (kN/m^3)		18.3			19.5	20.0				
DRY UNIT WEIGHT (kN/m^3)		13.7			15.9	15.6				
SPECIFIC GRAVITY		2.77				2.67				
ATTERBERG LIMITS										
LIQUID LIMIT, LL			48							
PLASTICITY INDEX, PI			24							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					76					
TORVANE (kPa)		34	24	24	43	62	34	77		
CORROSION										
pH	8.0									
RESISTIVITY (ohm-cm)	2300									
WATER SOLUBLE SULFATE (ppm)	48									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1097

Copyright Kleinfelder, Inc 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 3-248	SB- 3-248	SB- 3-248	SB- 3-248	SB- 3-248	SB- 3-249	SB- 3-249	SB- 3-249	SB- 3-249	SB- 3-249
SAMPLE DEPTH (m)	5.18	7.62	10.67	24.38	30.48	2.90	6.10	9.14	12.19	15.24
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6002+288.697	6002+288.697	6002+288.697	6002+288.697	6002+288.697	6002+229.597	6002+229.597	6002+229.597	6002+229.597	6002+229.597
OFFSET (RT or LT)	14.78 LT	14.78 LT	14.78 LT	14.78 LT	14.78 LT	1.90 RT	1.90 RT	1.90 RT	1.90 RT	1.90 RT
ELEVATION (m)	1287.03	1287.03	1287.03	1287.03	1287.03	1285.69	1285.69	1285.69	1285.69	1285.69
SAMPLE TYPE	P	P	P	P	P	P	P	P	P	P
DATE SAMPLED	1/21/2000	1/21/2000	1/21/2000	1/21/2000	1/21/2000	1/24/2000	1/24/2000	1/24/2000	1/24/2000	1/24/2000
SOIL CLASSIFICATION (USCS)	CL	CL	SM	CL	CL	CH	ML			CL
GROUP CLASSIFICATION (AASHTO)				A-7-6		A-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING			100							
NO. 4 (4760 microns)			100							
NO. 100 (147 microns)			76							
NO. 200 (74 microns)			38		97					97
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		49		42	26		58			35
WET UNIT WEIGHT (kN/m^3)		17.4		17.5	19.8		16.5			18.8
DRY UNIT WEIGHT (kN/m^3)		11.7		12.3	15.7		10.4			13.9
SPECIFIC GRAVITY		2.74		2.71			2.74			2.84
ATTERBERG LIMITS										
LIQUID LIMIT, LL		47		56			44			37
PLASTICITY INDEX, PI		23		32			15			15
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		24			113		43			68
TORVANE (kPa)	38	14		43	34	57	19	24	38	48
CORROSION										
pH	8.0					8.2				
RESISTIVITY (ohm-cm)	1900					1500				
WATER SOLUBLE SULFATE (ppm)	35					< 62				

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1098

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 3-249	SB- 3-250	SB- 3-250							
SAMPLE DEPTH (m)	21.34	9.14	15.24							
LINE	D MAINLINE	D MAINLINE	D MAINLINE							
STATION	6002+229.597	6002+277.848	6002+277.848							
OFFSET (RT or LT)	1.90 RT	6.92 RT	6.92 RT							
ELEVATION (m)	1285.69	1286.01	1286.01							
SAMPLE TYPE	P	SH	SH							
DATE SAMPLED	1/24/2000	1/24/2000	1/24/2000							
SOIL CLASSIFICATION (USCS)		CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			93							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		39	33							
WET UNIT WEIGHT (kN/m^3)		17.4	18.2							
DRY UNIT WEIGHT (kN/m^3)		12.5	13.7							
SPECIFIC GRAVITY		2.71	2.68							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		42	39							
PLASTICITY INDEX, PI		19	20							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			60							
TORVANE (kPa)	38	34	48							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1099

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 4-251	SB- 4-251	SB- 4-251	SB- 4-251	SB- 4-252	SB- 4-252	SB- 4-252	SB- 4-252		
SAMPLE DEPTH (m)	3.05	18.29	25.91	32.00	7.62	13.72	18.29	24.38		
LINE	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)	LP NB/I15(I215)		
STATION	54+663.358	54+663.358	54+663.358	54+663.358	54+711.938	54+711.938	54+711.938	54+711.938		
OFFSET (RT or LT)	0.41 RT	0.41 RT	0.41 RT	0.41 RT	0.83 RT	0.83 RT	0.83 RT	0.83 RT		
ELEVATION (m)	1284.83	1284.83	1284.83	1284.83	1286.04	1286.04	1286.04	1286.04		
SAMPLE TYPE	SH	P	P	P	SH	SH	SH	SH		
DATE SAMPLED	1/22/2000	1/22/2000	1/22/2000	1/22/2000	1/24/2000	1/24/2000	1/24/2000	1/24/2000		
SOIL CLASSIFICATION (USCS)	CL	SP-SM	CL	CL	CL	CL		ML		
GROUP CLASSIFICATION (AASHTO)		A-2-4						A-2-4		
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	87		98	84				51		
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	30		41	26		31		26		
WET UNIT WEIGHT (kN/m^3)	19.5		18.0	19.4		49.1		21.9		
DRY UNIT WEIGHT (kN/m^3)	15.0		12.7	15.5		37.4		17.4		
SPECIFIC GRAVITY	2.74		2.74	2.72		2.70		2.71		
ATTERBERG LIMITS										
LIQUID LIMIT, LL	34		47		40	32				
PLASTICITY INDEX, PI	14		22		17	14				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	40		137	79		78		50		
TORVANE (kPa)	24	5	38	19	24	53	53	57		
CORROSION										
pH	8.9									
RESISTIVITY (ohm-cm)	2200									
WATER SOLUBLE SULFATE (ppm)	25									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1100

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 5-293	SB- 5-293	SB- 5-293	SB- 5-293	SB- 5-297	SB- 5-297	SB- 5-297	SB- 5-297	SB- 5-297	SB- 5-297
SAMPLE DEPTH (m)	1.52	9.14	12.19	15.24	1.52	4.57	6.10	9.14	13.72	19.81
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB
STATION	58+453.275	58+453.275	58+453.275	58+453.275	58+572.515	58+572.515	58+572.515	58+572.515	58+572.515	58+572.515
OFFSET (RT or LT)	3.53 RT	3.53 RT	3.53 RT	3.53 RT	1.73 RT	1.73 RT	1.73 RT	1.73 RT	1.73 RT	1.73 RT
ELEVATION (m)	1284.34	1284.34	1284.34	1284.34	1284.91	1284.91	1284.91	1284.91	1284.91	1284.91
SAMPLE TYPE	SH	SH	SH	SH	SPT	P	SPT	P	P	SPT
DATE SAMPLED	2/24/2000	2/24/2000	2/24/2000	2/24/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000
SOIL CLASSIFICATION (USCS)	CH	CL		CL	ML	ML	CL-ML	CL		SP-SM
GROUP CLASSIFICATION (AASHTO)							A-6			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										100
NO. 4 (4760 microns)										99
NO. 100 (147 microns)										31
NO. 200 (74 microns)				92			84			15
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	64	41		31		47				
WET UNIT WEIGHT (kN/m^3)	16.1	17.9		18.4		17.4				
DRY UNIT WEIGHT (kN/m^3)	9.9	12.7		14.0		11.9				
SPECIFIC GRAVITY	2.84	2.78				2.81				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	52	44								
PLASTICITY INDEX, PI	27	23								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		52				34				
TORVANE (kPa)	19	38	48	48		29		38	29	
CORROSION										
pH					8.7					
RESISTIVITY (ohm-cm)					170					
WATER SOLUBLE SULFATE (ppm)					520					

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1101

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 5-297									
SAMPLE DEPTH (m)	25.91									
LINE	I-215 to LP SB									
STATION	58+572.515									
OFFSET (RT or LT)	1.73 RT									
ELEVATION (m)	1284.91									
SAMPLE TYPE	SPT									
DATE SAMPLED	2/22/2000									
SOIL CLASSIFICATION (USCS)	ML									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	100									
NO. 100 (147 microns)	99									
NO. 200 (74 microns)	58									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)										
WET UNIT WEIGHT (kN/m^3)										
DRY UNIT WEIGHT (kN/m^3)										
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1102

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 6-323	SB- 6-323	SB- 6-323	SB- 6-323	SB- 6-323	SB- 6-323	SB- 6-327	SB- 6-327	SB- 6-327	SB- 6-327
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	18.29	32.00	3.05	6.10	9.14	12.19
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB
STATION	56+793.225	56+793.225	56+793.225	56+793.225	56+793.225	56+793.225	56+992.123	56+992.123	56+992.123	56+992.123
OFFSET (RT or LT)	0.75 RT	0.75 RT	0.75 RT	0.75 RT	0.75 RT	0.75 RT	3.26 RT	3.26 RT	3.26 RT	3.26 RT
ELEVATION (m)	1284.91	1284.91	1284.91	1284.91	1284.91	1284.91	1285.66	1285.66	1285.66	1285.66
SAMPLE TYPE	SH	SH	SH	SH	SH	SH	SH	SH	SH	SH
DATE SAMPLED	2/1/2000	2/1/2000	2/1/2000	2/1/2000	2/1/2000	2/1/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000
SOIL CLASSIFICATION (USCS)	CL			CH	CL	ML	CL			CL
GROUP CLASSIFICATION (AASHTO)					A-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)				99						99
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				48		20	45			34
WET UNIT WEIGHT (kN/m^3)				18.0		20.7	17.5			19.1
DRY UNIT WEIGHT (kN/m^3)				12.1		17.3	12.1			14.2
SPECIFIC GRAVITY				2.78			2.81			2.75
ATTERBERG LIMITS										
LIQUID LIMIT, LL				52		22	46			
PLASTICITY INDEX, PI				28		2	22			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				82		85	49			69
TORVANE (kPa)	19	24	57	53	67	43	48	24	48	48
CORROSION										
pH	8.4									
RESISTIVITY (ohm-cm)	160									
WATER SOLUBLE SULFATE (ppm)	700									

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1103

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 6-327	SB- 6-327	SB- 6-327	SB- 6-328	SB- 6-328	SB- 6-328	SB- 6-333	SB- 6-333	SB- 6-333	
SAMPLE DEPTH (m)	15.24	24.38	33.53	1.52	10.67	16.76	7.62	10.67	13.72	
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	
STATION	56+992.123	56+992.123	56+992.123	57+038.520	57+038.520	57+038.520	57+288.790	57+288.790	57+288.790	
OFFSET (RT or LT)	3.26 RT	3.26 RT	3.26 RT	3.72 RT	3.72 RT	3.72 RT	3.48 RT	3.48 RT	3.48 RT	
ELEVATION (m)	1285.66	1285.66	1285.66	1285.08	1285.08	1285.08	1285.33	1285.33	1285.33	
SAMPLE TYPE	SH	SH	SH	SH	SH	SH	P	P	P	
DATE SAMPLED	2/2/2000	2/2/2000	2/2/2000	2/18/2000	2/18/2000	2/18/2000	2/16/2000	2/16/2000	2/16/2000	
SOIL CLASSIFICATION (USCS)		CL		CL	CL	CL	CL	CL	CL	
GROUP CLASSIFICATION (AASHTO)					A-6			A-6		
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	92			80		84	97			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				24		31	51		37	
WET UNIT WEIGHT (kN/m^3)				19.3		18.0	17.2		18.3	
DRY UNIT WEIGHT (kN/m^3)				15.5		13.7	11.4		13.3	
SPECIFIC GRAVITY				2.76		2.73			2.77	
ATTERBERG LIMITS										
LIQUID LIMIT, LL		33		43			42			
PLASTICITY INDEX, PI		13		19			23			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				67		76	53			
TORVANE (kPa)		77	86	38	77	81	43	57	62	
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1104

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 8/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 8-253	SB- 8-253	SB- 8-253	SB- 8-253	SB- 8-254	SB- 8-254	SB- 8-254	SB- 8-254	SB- 8-254	
SAMPLE DEPTH (m)	1.52	3.05	13.72	16.76	1.52	3.05	9.14	13.72	18.29	
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	
STATION	56+566.172	56+566.172	56+566.172	56+566.172	56+631.897	56+631.897	56+631.897	56+631.897	56+631.897	
OFFSET (RT or LT)	3.62 LT	3.62 LT	3.62 LT	3.62 LT	7.58 RT	7.58 RT	7.58 RT	7.58 RT	7.58 RT	
ELEVATION (m)	1284.92	1284.92	1284.92	1284.92	1285.94	1285.94	1285.94	1285.94	1285.94	
SAMPLE TYPE	SPT	SH	SH	SH	SPT	SH	SPT	SH	SH	
DATE SAMPLED	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/19/2000	1/19/2000	1/19/2000	1/19/2000	1/19/2000	
SOIL CLASSIFICATION (USCS)		CL	CL			CH	CL		CL	
GROUP CLASSIFICATION (AASHTO)							A-6		A-6	
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING							100			
NO. 4 (4760 microns)							100			
NO. 100 (147 microns)							61			
NO. 200 (74 microns)							57			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		58	28			37			41	
WET UNIT WEIGHT (kN/m^3)		16.7	19.5			18.1			17.7	
DRY UNIT WEIGHT (kN/m^3)		10.5	15.2			13.2			12.5	
SPECIFIC GRAVITY		2.73	2.71			2.70			2.81	
ATTERBERG LIMITS										
LIQUID LIMIT, LL		44				58			47	
PLASTICITY INDEX, PI		18				31			22	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		35				54			123	
TORVANE (kPa)		14	48	19		10		48	38	
CORROSION										
pH	8.9				8.4					
RESISTIVITY (ohm-cm)	380				2000					
WATER SOLUBLE SULFATE (ppm)	< 250				< 120					

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1105

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 9-298	SB- 9-298	SB- 9-298	SB- 9-298	SB- 9-298	SB- 9-298	SB- 9-298			
SAMPLE DEPTH (m)	1.52	3.05	4.57	7.62	10.67	21.34	30.48			
LINE	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB			
STATION	50+879.456	50+879.456	50+879.456	50+879.456	50+879.456	50+879.456	50+879.456			
OFFSET (RT or LT)	3.59 LT	3.59 LT	3.59 LT	3.59 LT	3.59 LT	3.59 LT	3.59 LT			
ELEVATION (m)	1285.43	1285.43	1285.43	1285.43	1285.43	1285.43	1285.43			
SAMPLE TYPE	SH	SPT	SH	SH	SH	SH	SH			
DATE SAMPLED	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000			
SOIL CLASSIFICATION (USCS)	CL	SC			CL	CL	CL			
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100								
NO. 4 (4760 microns)		100								
NO. 100 (147 microns)		82								
NO. 200 (74 microns)	99	39				86	89			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	49				35	34	20			
WET UNIT WEIGHT (kN/m^3)	17.6					17.9	20.0			
DRY UNIT WEIGHT (kN/m^3)	11.8					13.4	16.6			
SPECIFIC GRAVITY	2.83					2.74				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	45				42	43	24			
PLASTICITY INDEX, PI	21				17	23	11			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	31					208				
TORVANE (kPa)	34		19	24	19	67	53			
CORROSION										
pH	9.0									
RESISTIVITY (ohm-cm)	250									
WATER SOLUBLE SULFATE (ppm)	160									

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1106

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB- 9-299	SB- 9-299	SB- 9-299	SB- 9-299	SB- 9-299					
SAMPLE DEPTH (m)	0.00	7.62	10.67	18.29	35.05					
LINE	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB	I15 NB/LP NB					
STATION	50+943.558	50+943.558	50+943.558	50+943.558	50+943.558					
OFFSET (RT or LT)	1.87 LT	1.87 LT	1.87 LT	1.87 LT	1.87 LT					
ELEVATION (m)	1286.58	1286.58	1286.58	1286.58	1286.58					
SAMPLE TYPE	SPT	P	P	P	P					
DATE SAMPLED	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000					
SOIL CLASSIFICATION (USCS)	SM	CL		CL	CL-ML					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		99		99	86					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		39		29	23					
WET UNIT WEIGHT (kN/m^3)		18.5		19.2	20.0					
DRY UNIT WEIGHT (kN/m^3)		13.3		14.8	16.2					
SPECIFIC GRAVITY		2.79		2.68						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		31		34	17					
PLASTICITY INDEX, PI		10		11	6					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		31		93	180					
TORVANE (kPa)		29	29	57	67					
CORROSION										
pH	9.4									
RESISTIVITY (ohm-cm)	3000									
WATER SOLUBLE SULFATE (ppm)	<62									

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1107

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-10-300	SB-10-300	SB-10-303	SB-10-303	SB-10-303	SB-10-303	SB-10-303			
SAMPLE DEPTH (m)	3.05	9.14	3.05	6.10	9.14	12.19	13.72			
LINE	LP SB/115 SB	LP SB/115 SB	LP SB/115 SB	LP SB/115 SB	LP SB/115 SB	LP SB/115 SB	LP SB/115 SB			
STATION	56+350.479	56+350.479	56+429.922	56+429.922	56+429.922	56+429.922	56+429.922			
OFFSET (RT or LT)	2.36 RT	2.36 RT	2.23 RT	2.23 RT	2.23 RT	2.23 RT	2.23 RT			
ELEVATION (m)	1285.19	1285.19	1284.92	1284.92	1284.92	1284.92	1284.92			
SAMPLE TYPE	SH	SH	P	P	P	P	SPT			
DATE SAMPLED	1/14/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000			
SOIL CLASSIFICATION (USCS)	CL	SC	CL			CL	SM			
GROUP CLASSIFICATION (AASHTO)							A-3			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING							100			
NO. 4 (4760 microns)							100			
NO. 100 (147 microns)							73			
NO. 200 (74 microns)	100		98				19			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	66	20	58			32				
WET UNIT WEIGHT (kN/m^3)	16.0	21.3	15.6			19.3				
DRY UNIT WEIGHT (kN/m^3)	9.7	17.8	9.9			14.6				
SPECIFIC GRAVITY	2.80	2.77				2.77				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	46									
PLASTICITY INDEX, PI	19									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	27		24							
TORVANE (kPa)	10	29	10	19	48	48				
CORROSION										
pH	8.7		8.8							
RESISTIVITY (ohm-cm)	140		220							
WATER SOLUBLE SULFATE (ppm)	500		480							

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1108

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-11-259	SB-11-259	SB-11-259	SB-11-259	SB-11-259	SB-11-259	SB-11-262	SB-11-262	SB-11-262	SB-11-262
SAMPLE DEPTH (m)	1.22	2.74	5.79	8.84	27.13	33.22	1.52	4.57	7.62	10.67
LINE	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST	CENTER ST
STATION	5+389.204	5+389.204	5+389.204	5+389.204	5+389.204	5+389.204	5+495.950	5+495.950	5+495.950	5+495.950
OFFSET (RT or LT)	2.96 RT	2.96 RT	2.96 RT	2.96 RT	2.96 RT	2.96 RT	0.22 LT	0.22 LT	0.22 LT	0.22 LT
ELEVATION (m)	1285.19	1285.19	1285.19	1285.19	1285.19	1285.19	1286.12	1286.12	1286.12	1286.12
SAMPLE TYPE	SPT	P	P	P	P	P	SH	SH	SH	SH
DATE SAMPLED	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000
SOIL CLASSIFICATION (USCS)	CL			ML	SC		GM	CL	CL	CL
GROUP CLASSIFICATION (AASHTO)				A-2-4						
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING								100		
NO. 4 (4760 microns)								100		
NO. 100 (147 microns)								93		
NO. 200 (74 microns)				50	93			65	77	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				27	23				10	29
WET UNIT WEIGHT (kN/m^3)				19.5	20.6				18.9	9.6
DRY UNIT WEIGHT (kN/m^3)				15.3	16.8				17.3	7.5
SPECIFIC GRAVITY				2.68	2.74				2.76	
ATTERBERG LIMITS										
LIQUID LIMIT, LL				31	35				29	
PLASTICITY INDEX, PI				6	16				9	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				34	149				42	75
TORVANE (kPa)		38	38	34	43	34			38	24
CORROSION										
pH	9.1						9.4			
RESISTIVITY (ohm-cm)	180						380			
WATER SOLUBLE SULFATE (ppm)	500						220			

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1109

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00
Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-11-262									
SAMPLE DEPTH (m)	16.76									
LINE	CENTER ST									
STATION	5+495.950									
OFFSET (RT or LT)	0.22 LT									
ELEVATION (m)	1286.12									
SAMPLE TYPE	SH									
DATE SAMPLED	1/26/2000									
SOIL CLASSIFICATION (USCS)	CH									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	99									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	33									
WET UNIT WEIGHT (kN/m^3)	18.1									
DRY UNIT WEIGHT (kN/m^3)	13.6									
SPECIFIC GRAVITY	2.72									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	61									
PLASTICITY INDEX, PI	35									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	123									
TORVANE (kPa)	67									
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1110

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-12-263	SB-12-263	SB-12-263	SB-12-263	SB-12-263	SB-12-263	SB-12-263	SB-12-265	SB-12-265	SB-12-265
SAMPLE DEPTH (m)	1.52	5.18	7.62	18.29	24.38	35.05	41.15	1.52	4.57	13.72
LINE	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH
STATION	70+189.825	70+189.825	70+189.825	70+189.825	70+189.825	70+189.825	70+189.825	70+260.053	70+260.053	70+260.053
OFFSET (RT or LT)	4.65 LT	4.65 LT	4.65 LT	4.65 LT	4.65 LT	4.65 LT	4.65 LT	3.46 LT	3.46 LT	3.46 LT
ELEVATION (m)	1286.52	1286.52	1286.52	1286.52	1286.52	1286.52	1286.52	1286.64	1286.64	1286.64
SAMPLE TYPE	SH	SH	SH	SH	SH	SH	SH	SH	SH	SH
DATE SAMPLED	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/22/2000	1/22/2000	1/22/2000
SOIL CLASSIFICATION (USCS)	CL	CL	ML	CL		ML	ML	CL	CL	
GROUP CLASSIFICATION (AASHTO)			A-4			A-4				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)				94			99		97	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		38		22			26		27	
WET UNIT WEIGHT (kN/m^3)		18.1		20.1			19.8		19.9	
DRY UNIT WEIGHT (kN/m^3)		13.1		16.5			15.7		15.7	
SPECIFIC GRAVITY		2.75					2.70		2.77	
ATTERBERG LIMITS										
LIQUID LIMIT, LL		41		42					39	
PLASTICITY INDEX, PI		22		23					17	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		74		103			262		167	
TORVANE (kPa)	62	48	48	57	38	57	67	67	4	62
CORROSION										
pH	8.5							9.0		
RESISTIVITY (ohm-cm)	4900							2600		
WATER SOLUBLE SULFATE (ppm)	8							25		

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1111

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-12-265	SB-12-265	SB-12-265	SB-12-265						
SAMPLE DEPTH (m)	24.38	30.48	48.77	73.15						
LINE	500 SOUTH	500 SOUTH	500 SOUTH	500 SOUTH						
STATION	70+260.053	70+260.053	70+260.053	70+260.053						
OFFSET (RT or LT)	3.46 LT	3.46 LT	3.46 LT	3.46 LT						
ELEVATION (m)	1286.64	1286.64	1286.64	1286.64						
SAMPLE TYPE	SH	SH	SH	SH						
DATE SAMPLED	1/22/2000	1/22/2000	1/22/2000	1/22/2000						
SOIL CLASSIFICATION (USCS)		CL	ML	CL						
GROUP CLASSIFICATION (AASHTO)		A-7-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		99	100	96						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		26	27	26						
WET UNIT WEIGHT (kN/m^3)		20.3	19.1	20.6						
DRY UNIT WEIGHT (kN/m^3)		16.1	15.1	16.4						
SPECIFIC GRAVITY		2.80	2.77	2.84						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		43	44	39						
PLASTICITY INDEX, PI		17	17	16						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		272	220	197						
TORVANE (kPa)	57	43	62	120						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1112

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-13-304	SB-13-304	SB-13-304	SB-13-304	SB-13-304	SB-13-304	SB-13-308	SB-13-308	SB-13-308	SB-13-308
SAMPLE DEPTH (m)	1.52	4.57	10.67	13.72	27.43	42.67	1.52	8.23	42.67	50.29
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+183.023	6013+183.023	6013+183.023	6013+183.023	6013+183.023	6013+183.023	6013+313.168	6013+313.168	6013+313.168	6013+313.168
OFFSET (RT or LT)	12.24 RT	12.24 RT	12.24 RT	12.24 RT	12.24 RT	12.24 RT	14.02 RT	14.02 RT	14.02 RT	14.02 RT
ELEVATION (m)	1285.10	1285.10	1285.10	1285.10	1285.10	1285.10	1285.13	1285.13	1285.13	1285.13
SAMPLE TYPE	P	P	P	P	P	P	P	P	P	P
DATE SAMPLED	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/9/2000	1/9/2000	1/9/2000	1/9/2000
SOIL CLASSIFICATION (USCS)	CL	CL		CL	CL		CL	MH	SM	CL
GROUP CLASSIFICATION (AASHTO)	A-7-6			A-6	A-6					A-6
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING									100	
NO. 4 (4760 microns)									100	
NO. 100 (147 microns)									40	
NO. 200 (74 microns)					85			97	22	93
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		33			28		26	42		46
WET UNIT WEIGHT (kN/m^3)		19.0			20.5		19.6	18.1		17.5
DRY UNIT WEIGHT (kN/m^3)		14.4			16.0		15.6	12.8		12.0
SPECIFIC GRAVITY	2.83	2.77			2.78		2.83			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		45			34			56		
PLASTICITY INDEX, PI		24			14			24		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		51			88			18		87
TORVANE (kPa)	53	57	48	48	29	29				
CORROSION										
pH	8.5						8.2			
RESISTIVITY (ohm-cm)	2000						2900			
WATER SOLUBLE SULFATE (ppm)	75						65			

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1113

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-14-309	SB-14-309	SB-14-309	SB-14-309	SB-14-309	SB-14-309	SB-14-309	SB-14-309	SB-14-313	SB-14-313
SAMPLE DEPTH (m)	2.74	4.27	7.32	10.36	13.41	17.98	27.13	39.32	1.52	7.62
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+229.665	6013+229.665	6013+229.665	6013+229.665	6013+229.665	6013+229.665	6013+229.665	6013+229.665	6013+394.540	6013+394.540
OFFSET (RT or LT)	16.35 LT	16.35 LT	16.35 LT	16.35 LT	16.35 LT	16.35 LT	16.35 LT	16.35 LT	17.55 LT	17.55 LT
ELEVATION (m)	1285.72	1285.72	1285.72	1285.72	1285.72	1285.72	1285.72	1285.72	1285.36	1285.36
SAMPLE TYPE	MC	P	P	P	P	P	SH	P	SH	SH
DATE SAMPLED	1/6/2000	1/6/2000	1/6/2000	1/6/2000	1/6/2000	1/6/2000	1/6/2000	1/6/2000	1/17/2000	1/17/2000
SOIL CLASSIFICATION (USCS)	CL	CL		CL		SP-SC	CL		CL	MH
GROUP CLASSIFICATION (AASHTO)	A-6					A-2-7				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)							77			100
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		31		56			23		26	61
WET UNIT WEIGHT (kN/m^3)		18.8		16.7			20.4			16.7
DRY UNIT WEIGHT (kN/m^3)		14.4		10.7			16.7			10.4
SPECIFIC GRAVITY		2.75					2.79			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		43								69
PLASTICITY INDEX, PI		19								33
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				41						65
TORVANE (kPa)		43	81	48	38	29	77	48		
CORROSION										
pH	7.8								8.3	
RESISTIVITY (ohm-cm)	1200								2400	
WATER SOLUBLE SULFATE (ppm)	90								95	

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1114

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-14-313	SB-14-313	SB-14-313							
SAMPLE DEPTH (m)	21.34	42.67	53.34							
LINE	D MAINLINE	D MAINLINE	D MAINLINE							
STATION	6013+394.540	6013+394.540	6013+394.540							
OFFSET (RT or LT)	17.55 LT	17.55 LT	17.55 LT							
ELEVATION (m)	1285.36	1285.36	1285.36							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	1/17/2000	1/17/2000	1/17/2000							
SOIL CLASSIFICATION (USCS)	ML	ML	ML							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	87	55	76							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	31	20	24							
WET UNIT WEIGHT (kN/m^3)	19.6	20.9	20.3							
DRY UNIT WEIGHT (kN/m^3)	14.9	17.3	16.3							
SPECIFIC GRAVITY			2.76							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			36							
PLASTICITY INDEX, PI			5							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	133	132								
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1115

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/200

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-15-266	SB-15-266	SB-15-266	SB-15-266	SB-15-266	SB-15-267	SB-15-267	SB-15-267	SB-15-267	SB-15-267
SAMPLE DEPTH (m)	1.52	3.05	21.34	24.38	48.77		3.96	5.49	8.53	11.58
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+775.425	6013+775.425	6013+775.425	6013+775.425	6013+775.425	6013+826.409	6013+826.409	6013+826.409	6013+826.409	6013+826.409
OFFSET (RT or LT)	10.05 LT	10.05 LT	10.05 LT	10.05 LT	10.05 LT	15.73 LT	15.73 LT	15.73 LT	15.73 LT	15.73 LT
ELEVATION (m)	1285.58	1285.58	1285.58	1285.58	1285.58	1285.61	1285.61	1285.61	1285.61	1285.61
SAMPLE TYPE	SPT	P	SPT	P	P		P	SH	SH	SH
DATE SAMPLED	1/4/2000	1/4/2000	1/4/2000	1/4/2000	1/4/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000
SOIL CLASSIFICATION (USCS)	CL	CL	SW-SM	MH	CH	CL		CL	CH	
GROUP CLASSIFICATION (AASHTO)	A-7-6		A-1-6						A-7-6	
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING			100							
NO. 4 (4760 microns)			98							
NO. 100 (147 microns)			9							
NO. 200 (74 microns)		92	8	98	98			98		
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		26		35	31			30		
WET UNIT WEIGHT (kN/m^3)		20.2		17.9	20.4			19.5		
DRY UNIT WEIGHT (kN/m^3)		16.0		13.3	15.6			15.0		
SPECIFIC GRAVITY					2.84			2.75		
ATTERBERG LIMITS										
LIQUID LIMIT, LL		44		58				41		
PLASTICITY INDEX, PI		25		27				20		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		155		82	132			168		
TORVANE (kPa)							57	48	29	48
CORROSION										
pH	9.9					9.2				
RESISTIVITY (ohm-cm)	610					610				
WATER SOLUBLE SULFATE (ppm)	<500					70				

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1116

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-15-267	SB-15-267	SB-15-267	SB-15-267	SB-15-267					
SAMPLE DEPTH (m)	14.63	27.43	45.72	48.16	54.86					
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE					
STATION	6013+826.409	6013+826.409	6013+826.409	6013+826.409	6013+826.409					
OFFSET (RT or LT)	15.73 LT	15.73 LT	15.73 LT	15.73 LT	15.73 LT					
ELEVATION (m)	1285.61	1285.61	1285.61	1285.61	1285.61					
SAMPLE TYPE	SH	SH	SH	SH	SH					
DATE SAMPLED	1/14/2000	1/14/2000	1/14/2000	1/14/2000	1/14/2000					
SOIL CLASSIFICATION (USCS)	SP	ML	CL		SC					
GROUP CLASSIFICATION (AASHTO)	A-3		A-6		A-2-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		80		99						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		28		32						
WET UNIT WEIGHT (kN/m^3)		19.9		19.0						
DRY UNIT WEIGHT (kN/m^3)		15.6		14.4						
SPECIFIC GRAVITY		2.83								
ATTERBERG LIMITS										
LIQUID LIMIT, LL		32								
PLASTICITY INDEX, PI		8								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		88		99						
TORVANE (kPa)	43	48	24	48	48					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1117

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359	SB-1504-359
SAMPLE DEPTH (m)	1.52	4.27	7.32	13.41	21.03	24.08	30.18	36.27	45.42	51.51
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601	6013+625.601
OFFSET (RT or LT)	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT	15.30 LT
ELEVATION (m)	1285.39	1285.39	1285.39	1285.39	1285.39	1285.39	1285.39	1285.39	1285.39	1285.39
SAMPLE TYPE	P	P	P	P	SPT	P	P	P	P	P
DATE SAMPLED	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000
SOIL CLASSIFICATION (USCS)	CL				SP-SM	CL				CH
GROUP CLASSIFICATION (AASHTO)					A-2-5	A-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING					100					
NO. 4 (4760 microns)					96					
NO. 100 (147 microns)					10					
NO. 200 (74 microns)	97				7	96				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	28					30				27
WET UNIT WEIGHT (kN/m^3)	20.2					19.1				18.7
DRY UNIT WEIGHT (kN/m^3)	15.9					14.8				14.8
SPECIFIC GRAVITY	2.72				2.70	2.76				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	39					34				51
PLASTICITY INDEX, PI	22					16				24
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	88					74				
TORVANE (kPa)	48	57	48	67		29	48	43	48	67
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1118

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-16-268	SB-16-268	SB-16-268	SB-16-268	SB-16-268	SB-16-268	SB-16-362	SB-16-362	SB-16-362	SB-16-362
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72	21.34	4.42	7.47	10.52	13.56
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+763.715	6013+763.715	6013+763.715	6013+763.715	6013+763.715	6013+763.715	6013+745.798	6013+745.798	6013+745.798	6013+745.798
OFFSET (RT or LT)	14.55 RT	14.55 RT	14.55 RT	14.55 RT	14.55 RT	14.55 RT	14.50 RT	14.50 RT	14.50 RT	14.50 RT
ELEVATION (m)	1285.91	1285.91	1285.91	1285.91	1285.91	1285.91	1285.22	1285.22	1285.22	1285.22
SAMPLE TYPE	P	P	P	P	P	SPT	P	P	P	P
DATE SAMPLED	1/4/2000	1/4/2000	1/4/2000	1/4/2000	1/4/2000	1/4/2000	5/15/2000	5/15/2000	5/15/2000	5/15/2000
SOIL CLASSIFICATION (USCS)	CL			CL	CL	SM	CL	CL		
GROUP CLASSIFICATION (AASHTO)							A-7-6			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING						100				
NO. 4 (4760 microns)						100				
NO. 100 (147 microns)						19				
NO. 200 (74 microns)						13		98		
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	29			49				48		
WET UNIT WEIGHT (kN/m^3)	18.9			17.3				17.4		
DRY UNIT WEIGHT (kN/m^3)	14.7			11.6				11.8		
SPECIFIC GRAVITY	2.73			2.76				2.69		
ATTERBERG LIMITS										
LIQUID LIMIT, LL								50		
PLASTICITY INDEX, PI								23		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					47			130		
TORVANE (kPa)	29	38	43	62	38		43	43	48	38
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1119

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-16-362	SB-16-362	SB-16-362	SB-16-362	SB-16-362	SB-16-362				
SAMPLE DEPTH (m)	18.14	24.23	30.33	42.52	54.71	60.81				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6013+745.798	6013+745.798	6013+745.798	6013+745.798	6013+745.798	6013+745.798				
OFFSET (RT or LT)	14.50 RT	14.50 RT	14.50 RT	14.50 RT	14.50 RT	14.50 RT				
ELEVATION (m)	1285.22	1285.22	1285.22	1285.22	1285.22	1285.22				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	5/15/2000	5/15/2000	5/15/2000	5/15/2000	5/15/2000	5/15/2000				
SOIL CLASSIFICATION (USCS)	SM	CL-ML	CL			CL				
GROUP CLASSIFICATION (AASHTO)		A-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	100									
NO. 100 (147 microns)	51									
NO. 200 (74 microns)	47		85		34					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	30		31							
WET UNIT WEIGHT (kN/m^3)	18.3		19.4							
DRY UNIT WEIGHT (kN/m^3)	14.1		14.8							
SPECIFIC GRAVITY			2.73			2.73				
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			211							
TORVANE (kPa)		67	86	77	29	57				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1120

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-17-271	SB-17-271	SB-17-271	SB-17-271	SB-17-271	SB-17-271	SB-17-271	SB-17-271	SB-17-271	
SAMPLE DEPTH (m)	1.22	2.74	5.79	11.89	14.94	21.03	27.13	43.89	49.99	
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	
STATION	6014+637.289	6014+637.289	6014+637.289	6014+637.289	6014+637.289	6014+637.289	6014+637.289	6014+637.289	6014+637.289	
OFFSET (RT or LT)	19.57 RT	19.57 RT	19.57 RT	19.57 RT.	19.57 RT	19.57 RT	19.57 RT	19.57 RT	19.57 RT	
ELEVATION (m)	1284.81	1284.81	1284.81	1284.81	1284.81	1284.81	1284.81	1284.81	1284.81	
SAMPLE TYPE	SPT	SH	SH	SH	SH	SH	SH	SH	SH	
DATE SAMPLED	1/15/2000	1/15/2000	1/15/2000	1/15/2000	1/15/2000	1/15/2000	1/15/2000	1/15/2000	1/15/2000	
SOIL CLASSIFICATION (USCS)	CL		SC-SM	ML		CL	CL-ML	CL	CL	
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)						98				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			42	56		48	33	32	76	
WET UNIT WEIGHT (kN/m^3)			17.5	16.6		17.8	18.8	18.8	15.1	
DRY UNIT WEIGHT (kN/m^3)			12.3	10.6		12.0	14.1	14.2	8.5	
SPECIFIC GRAVITY			2.70	2.73		2.70	2.84	2.77	2.70	
ATTERBERG LIMITS										
LIQUID LIMIT, LL				47					124	
PLASTICITY INDEX, PI				18					43	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			27			89			203	
TORVANE (kPa)		77	38	34	48	62	57	67	77	
CORROSION										
pH	8.8									
RESISTIVITY (ohm-cm)	3600									
WATER SOLUBLE SULFATE (ppm)	29									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1121

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-18-272	SB-18-272	SB-18-272	SB-18-272	SB-18-272					
SAMPLE DEPTH (m)	4.57	7.62	24.38	30.48	85.34					
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE					
STATION	6014+611.633	6014+611.633	6014+611.633	6014+611.633	6014+611.633					
OFFSET (RT or LT)	19.41 LT	19.41 LT	19.41 LT	19.41 LT	19.41 LT					
ELEVATION (m)	1285.39	1285.39	1285.39	1285.39	1285.39					
SAMPLE TYPE	SH	SH	SH	SH	SH					
DATE SAMPLED	1/4/2000	1/4/2000	1/4/2000	1/4/2000	1/4/2000					
SOIL CLASSIFICATION (USCS)	CL	CL	CL	CL	SM					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING					100					
NO. 4 (4760 microns)					99					
NO. 100 (147 microns)					33					
NO. 200 (74 microns)	97	97	99	100	26					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	44	57	40	46						
WET UNIT WEIGHT (kN/m^3)	17.7	17.2	18.1	17.2						
DRY UNIT WEIGHT (kN/m^3)	12.3	11.0	12.9	11.8						
SPECIFIC GRAVITY	2.81		2.78							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	32									
PLASTICITY INDEX, PI	13									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		17		155						
TORVANE (kPa)										
CORROSION										
pH	8.4									
RESISTIVITY (ohm-cm)	450									
WATER SOLUBLE SULFATE (ppm)	480									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1122

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-19-274	SB-19-274	SB-19-274	SB-19-274	SB-19-274	SB-19-276	SB-19-276	SB-19-276	SB-19-276	SB-19-276
SAMPLE DEPTH (m)	12.19	15.24	21.34	25.91	32.00	1.52	13.72	18.29	21.64	24.38
LINE	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN
STATION	50+645.384	50+645.384	50+645.384	50+645.384	50+645.384	50+705.923	50+705.923	50+705.923	50+705.923	50+705.923
OFFSET (RT or LT)	0.04 RT	0.04 RT	0.04 RT	0.04 RT	0.04 RT	0.19 LT	0.19 LT	0.19 LT	0.19 LT	0.19 LT
ELEVATION (m)	1299.16	1299.16	1299.16	1299.16	1299.16	1302.07	1302.07	1302.07	1302.07	1302.07
SAMPLE TYPE	P	P	P	P	P	MC	SH	SH	SH	SH
DATE SAMPLED	2/3/2000	2/3/2000	2/3/2000	2/3/2000	2/3/2000	2/1/2000	2/1/2000	2/1/2000	2/1/2000	2/1/2000
SOIL CLASSIFICATION (USCS)		CL		SC		SP		CL		CL
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		94		49				91		
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		29		19				25		30
WET UNIT WEIGHT (kN/m^3)		19.3		20.2				21.3		19.0
DRY UNIT WEIGHT (kN/m^3)		14.9		17.1				17.1		14.6
SPECIFIC GRAVITY		2.75		2.77				2.84		2.83
ATTERBERG LIMITS										
LIQUID LIMIT, LL		36		68				35		36
PLASTICITY INDEX, PI		12		38				11		15
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		90		94				150		127
TORVANE (kPa)	43	48	43	53	38		48	48	53	62
CORROSION										
pH						8.8				
RESISTIVITY (ohm-cm)						1400				
WATER SOLUBLE SULFATE (ppm)						180				

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1123

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-19-276	SB-19-279	SB-19-279	SB-19-279	SB-19-279	SB-19-279	SB-19-279	SB-19-279	SB-19-279	SB-19-279
SAMPLE DEPTH (m)	30.48	1.37	6.71	7.62	9.14	10.67	13.72	18.29	21.34	30.48
LINE	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN
STATION	50+705.923	50+775.871	50+775.871	50+775.871	50+775.871	50+775.871	50+775.871	50+775.871	50+775.871	50+775.871
OFFSET (RT or LT)	0.19 LT	5.71 RT	5.71 RT	5.71 RT	5.71 RT	5.71 RT	5.71 RT	5.71 RT	5.71 RT	5.71 RT
ELEVATION (m)	1302.07	1291.95	1291.95	1291.95	1291.95	1291.95	1291.95	1291.95	1291.95	1291.95
SAMPLE TYPE	SH	P	P	P	SPT	P	P	P	P	P
DATE SAMPLED	2/1/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000
SOIL CLASSIFICATION (USCS)		CL	ML	CL		CL		CL		
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			95		11					6
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		31	34	34		31		30		
WET UNIT WEIGHT (kN/m^3)		18.1	19.4	18.7		19.4		19.2		
DRY UNIT WEIGHT (kN/m^3)		13.8	14.4	14.0		14.8		14.7		
SPECIFIC GRAVITY		2.76		2.81				2.70		
ATTERBERG LIMITS										
LIQUID LIMIT, LL		43	38			40				
PLASTICITY INDEX, PI		17	13			19				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			60			89				
TORVANE (kPa)	29	46	38	43		53	38	48	57	
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1124

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-19-279	SB-19-281	SB-19-281	SB-19-281	SB-19-281	SB-19-281	SB-19-281	SB-19-281		
SAMPLE DEPTH (m)	36.58	2.74	6.10	9.14	12.19	15.85	19.81	24.38		
LINE	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN	GLOVERS LN		
STATION	50+775.871	50+840.936	50+840.936	50+840.936	50+840.936	50+840.936	50+840.936	50+840.936		
OFFSET (RT or LT)	5.71 RT	7.44 RT	7.44 RT	7.44 RT	7.44 RT	7.44 RT	7.44 RT	7.44 RT		
ELEVATION (m)	1291.95	1291.98	1291.98	1291.98	1291.98	1291.98	1291.98	1291.98		
SAMPLE TYPE	SPT	P	P	P	P	P	SPT	P		
DATE SAMPLED	3/3/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000		
SOIL CLASSIFICATION (USCS)	SM			CL		MH				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	79									
NO. 100 (147 microns)	35									
NO. 200 (74 microns)	26			96		96				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				31		50				
WET UNIT WEIGHT (kN/m^3)				20.2		17.8				
DRY UNIT WEIGHT (kN/m^3)				15.4		11.8				
SPECIFIC GRAVITY				2.80		2.68				
ATTERBERG LIMITS										
LIQUID LIMIT, LL						50				
PLASTICITY INDEX, PI						16				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				59		93				
TORVANE (kPa)		43	38	48	48	29	48	34		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1125

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-21-282	SB-21-282	SB-21-282	SB-21-284						
SAMPLE DEPTH (m)	7.62	13.72	16.76	21.34						
LINE	STATE ST.	STATE ST.	STATE ST.	STATE ST.						
STATION	0+648.656	0+648.656	0+648.656	0+740.395						
OFFSET (RT or LT)	3.03 LT	3.03 LT	3.03 LT	3.19 LT						
ELEVATION (m)	1300.65	1300.65	1300.65	1305.36						
SAMPLE TYPE	SH	SH	SH	P						
DATE SAMPLED	2/14/2000	2/14/2000	2/14/2000	2/14/2000						
SOIL CLASSIFICATION (USCS)	CH		CL	CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	97		96	85						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	38		27	22						
WET UNIT WEIGHT (kN/m^3)	18.7		20.0	20.7						
DRY UNIT WEIGHT (kN/m^3)	13.6		15.7	16.9						
SPECIFIC GRAVITY	2.82		2.78	2.74						
ATTERBERG LIMITS										
LIQUID LIMIT, LL	54		35	30						
PLASTICITY INDEX, PI	26		13	8						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	70		102	63						
TORVANE (kPa)	29	24	38	48						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1126

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-22-285	SB-22-288								
SAMPLE DEPTH (m)	13.72	2.44								
LINE	STATE ST.	STATE ST.								
STATION	0+773.642	0+918.648								
OFFSET (RT or LT)	3.26 LT	12.68 RT								
ELEVATION (m)	1306.61	1304.55								
SAMPLE TYPE	P	SPT								
DATE SAMPLED	2/15/2000	2/21/2000								
SOIL CLASSIFICATION (USCS)	CL	SM								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	58									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	28									
WET UNIT WEIGHT (kN/m^3)	19.8									
DRY UNIT WEIGHT (kN/m^3)	15.5									
SPECIFIC GRAVITY	2.78									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	42									
PLASTICITY INDEX, PI	19									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	89									
TORVANE (kPa)	43									
CORROSION										
pH		8.4								
RESISTIVITY (ohm-cm)		3900								
WATER SOLUBLE SULFATE (ppm)		23								

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1127

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-23-289	SB-23-290C	SB-23-290C							
SAMPLE DEPTH (m)	9.14	9.14	12.19							
LINE	I-15 SB/ LP SB	I-15 SB/ LP SB	I-15 SB/ LP SB							
STATION	60+436.602	60+599.449	60+599.449							
OFFSET (RT or LT)	0.52 LT	4.87 LT	4.87 LT							
ELEVATION (m)	1295.08	1297.43	1297.43							
SAMPLE TYPE	SPT	SH	SH							
DATE SAMPLED	2/28/2000	2/9/2000	2/9/2000							
SOIL CLASSIFICATION (USCS)	SP-SM	ML	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	96									
NO. 100 (147 microns)	12									
NO. 200 (74 microns)	7	95	93							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		34	30							
WET UNIT WEIGHT (kN/m^3)		19.7	19.7							
DRY UNIT WEIGHT (kN/m^3)		14.7	15.1							
SPECIFIC GRAVITY		2.80	2.81							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		32								
PLASTICITY INDEX, PI		8								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)		38	53							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1128

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-24-255	SB-24-255	SB-24-258	SB-24-258	SB-24-258					
SAMPLE DEPTH (m)	1.52	3.05	1.52	3.05	10.67					
LINE	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB					
STATION	20+512.743	20+512.743	20+666.464	20+666.464	20+666.464					
OFFSET (RT or LT)	20.84 LT	20.84 LT	1.21 RT	1.21 RT	1.21 RT					
ELEVATION (m)	1295.24	1295.24	1297.71	1297.71	1297.71					
SAMPLE TYPE	SH	SPT	SPT	P	P					
DATE SAMPLED	3/16/2000	3/16/2000	2/10/2000	2/10/2000	2/10/2000					
SOIL CLASSIFICATION (USCS)	ML		ML	ML	ML					
GROUP CLASSIFICATION (AASHTO)				A-6						
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	93	17		82	5					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	32			30	27					
WET UNIT WEIGHT (kN/m^3)	19.5			20.3	20.0					
DRY UNIT WEIGHT (kN/m^3)	14.7			15.7	15.8					
SPECIFIC GRAVITY	2.69			2.78	2.78					
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	85			79	19					
TORVANE (kPa)	43			53	38					
CORROSION										
pH	7.8		7.5							
RESISTIVITY (ohm-cm)	4800		6100							
WATER SOLUBLE SULFATE (ppm)	<25		<120							

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1129

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-25-334	SB-25-334	SB-25-334	SB-25-334	SB-25-336	SB-25-336	SB-25-336			
SAMPLE DEPTH (m)	1.52	3.05	6.71	9.14	3.05	4.57	6.10			
LINE	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB	LP NB/I15 NB			
STATION	20+723.909	20+723.909	20+723.909	20+723.909	20+862.412	20+862.412	20+862.412			
OFFSET (RT or LT)	2.88 LT	2.88 LT	2.88 LT	2.88 LT	6.42 RT	6.42 RT	6.42 RT			
ELEVATION (m)	1296.74	1296.74	1296.74	1296.74	1297.15	1297.15	1297.15			
SAMPLE TYPE	SPT	P	P	P	SH	SPT	SH			
DATE SAMPLED	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000			
SOIL CLASSIFICATION (USCS)	CL	CL		CL	ML	ML	CL			
GROUP CLASSIFICATION (AASHTO)				A-6						
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING						100				
NO. 4 (4760 microns)						100				
NO. 100 (147 microns)						100				
NO. 200 (74 microns)				97		95	87			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		41		28			28			
WET UNIT WEIGHT (kN/m^3)		18.1		19.5			19.6			
DRY UNIT WEIGHT (kN/m^3)		12.8		15.2			15.3			
SPECIFIC GRAVITY		2.81		2.78			2.75			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		42		35						
PLASTICITY INDEX, PI		16		13						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		35		109			78			
TORVANE (kPa)		38	48	48	38		34			
CORROSION										
pH	7.1				7.5					
RESISTIVITY (ohm-cm)	6100				6100					
WATER SOLUBLE SULFATE (ppm)	150				150					

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1130

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-26-337	SB-26-337	SB-26-337							
SAMPLE DEPTH (m)	1.22	4.57	7.62							
LINE	89 SB/I15 SB	89 SB/I15 SB	89 SB/I15 SB							
STATION	12+605.204	12+605.204	12+605.204							
OFFSET (RT or LT)	1.91 LT	1.91 LT	1.91 LT							
ELEVATION (m)	1297.07	1297.07	1297.07							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	2/10/2000	2/10/2000	2/10/2000							
SOIL CLASSIFICATION (USCS)	SP		CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			29							
WET UNIT WEIGHT (kN/m^3)			20.0							
DRY UNIT WEIGHT (kN/m^3)			15.5							
SPECIFIC GRAVITY			2.79							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			40							
PLASTICITY INDEX, PI			18							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			68							
TORVANE (kPa)		38	57							
CORROSION										
pH	8.3									
RESISTIVITY (ohm-cm)	2800									
WATER SOLUBLE SULFATE (ppm)	<120									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1131

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-26-339	SB-26-339	SB-26-339	SB-26-339						
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67						
LINE	89 SB/I15 SB	89 SB/I15 SB	89 SB/I15 SB	89 SB/I15 SB						
STATION	12+741.455	12+741.455	12+741.455	12+741.455						
OFFSET (RT or LT)	16.33 LT	16.33 LT	16.33 LT	16.33 LT						
ELEVATION (m)	1297.58	1297.58	1297.58	1297.58						
SAMPLE TYPE	SH	SH	SH	SH						
DATE SAMPLED	2/9/2000	2/9/2000	2/9/2000	2/9/2000						
SOIL CLASSIFICATION (USCS)		ML	ML	ML						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		93	92	96						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		30	29	25						
WET UNIT WEIGHT (kN/m^3)		19.5	19.8	20.6						
DRY UNIT WEIGHT (kN/m^3)		15.0	15.4	16.5						
SPECIFIC GRAVITY		2.71								
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			67	101						
TORVANE (kPa)	38	29	38	48						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1132

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-27-340	SB-27-345	SB-27-345	SB-27-345						
SAMPLE DEPTH (m)	7.62	2.74	6.10	9.14						
LINE	89 SB/I15 SB	89 SB/I15 SB	89 SB/I15 SB	89 SB/I15 SB						
STATION	70+686.974	71+011.211	71+011.211	71+011.211						
OFFSET (RT or LT)	0.76 RT	0.83 RT	0.83 RT	0.83 RT						
ELEVATION (m)	1295.85	1298.19	1298.19	1298.19						
SAMPLE TYPE	SPT	SH	SH	SH						
DATE SAMPLED	2/24/2000	2/9/2000	2/9/2000	2/9/2000						
SOIL CLASSIFICATION (USCS)	SW-SM	CL	CL	CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	93									
NO. 100 (147 microns)	13									
NO. 200 (74 microns)	7		84	80						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	23		27	32						
WET UNIT WEIGHT (kN/m^3)			20.1	19.6						
DRY UNIT WEIGHT (kN/m^3)			15.9	14.9						
SPECIFIC GRAVITY			2.74	2.76						
ATTERBERG LIMITS										
LIQUID LIMIT, LL			33							
PLASTICITY INDEX, PI			11							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			49	17						
TORVANE (kPa)		43	34	29						
CORROSION										
pH		7.4								
RESISTIVITY (ohm-cm)		16000								
WATER SOLUBLE SULFATE (ppm)		35								

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1133

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-28-346	SB-28-346	SB-28-346	SB-28-346	SB-28-346	SB-28-347	SB-28-347	SB-28-347	SB-28-347	SB-28-347
SAMPLE DEPTH (m)	1.52	3.05	6.10	9.14	12.19	1.52	3.05	6.10	9.14	12.19
LINE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE
STATION	4+859.468	4+859.468	4+859.468	4+859.468	4+859.468	4+934.261	4+934.261	4+934.261	4+934.261	4+934.261
OFFSET (RT or LT)	3.67 RT	3.67 RT	3.67 RT	3.67 RT	3.67 RT	1.02 RT	1.02 RT	1.02 RT	1.02 RT	1.02 RT
ELEVATION (m)	1294.32	1294.32	1294.32	1294.32	1294.32	1296.38	1296.38	1296.38	1296.38	1296.38
SAMPLE TYPE	SPT	P	P	P	P	SPT	SH	P	P	P
DATE SAMPLED	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	2/10/2000	2/10/2000	2/10/2000	2/10/2000	2/10/2000
SOIL CLASSIFICATION (USCS)	CL	CL		CL	CL	ML		ML		CL
GROUP CLASSIFICATION (AASHTO)						A-4				A-6
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)					99					98
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		26		30	23			28		27
WET UNIT WEIGHT (kN/m^3)		21.0		19.8	20.8			19.7		19.3
DRY UNIT WEIGHT (kN/m^3)		16.7		15.2	17.0			15.4		15.2
SPECIFIC GRAVITY		2.72		2.78	2.70			2.70		2.75
ATTERBERG LIMITS										
LIQUID LIMIT, LL		29			32			33		35
PLASTICITY INDEX, PI		7			12			9		12
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		74			216			112		115
TORVANE (kPa)		38	43	38			24	38	38	53
CORROSION										
pH	8.7					8.4				
RESISTIVITY (ohm-cm)	3300					3200				
WATER SOLUBLE SULFATE (ppm)	<12					<500				

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1134

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-29-348	SB-29-348	SB-29-348	SB-29-348	SB-29-350	SB-29-350	SB-29-350			
SAMPLE DEPTH (m)	2.13	4.57	7.62	10.67	10.67	14.33	18.90			
LINE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE			
STATION	4+961.767	4+961.767	4+961.767	4+961.767	5+066.599	5+066.599	5+066.599			
OFFSET (RT or LT)	0.38 LT	0.38 LT	0.38 LT	0.38 LT	19.50 RT	19.50 RT	19.50 RT			
ELEVATION (m)	1296.27	1296.27	1296.27	1296.27	1304.76	1304.76	1304.76			
SAMPLE TYPE	P	P	P	P	P	P	P			
DATE SAMPLED	2/7/2000	2/7/2000	2/7/2000	2/7/2000	2/11/2000	2/11/2000	2/11/2000			
SOIL CLASSIFICATION (USCS)	ML	ML		ML		SM				
GROUP CLASSIFICATION (AASHTO)						A-2-5				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		90		90		60	92			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		24		23		24	24			
WET UNIT WEIGHT (kN/m^3)		20.3		20.1		20.1	19.8			
DRY UNIT WEIGHT (kN/m^3)		16.5		16.3		16.2	15.9			
SPECIFIC GRAVITY		2.68		2.72		2.74	2.73			
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		77		73						
TORVANE (kPa)	14	29	24	29	14	19	53			
CORROSION										
pH	8.6									
RESISTIVITY (ohm-cm)	1900									
WATER SOLUBLE SULFATE (ppm)	<5.0									

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1135

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-30-351	SB-30-351	SB-30-351	SB-30-351	SB-30-351	SB-30-351	SB-30-352	SB-30-352	SB-30-352	SB-30-352
SAMPLE DEPTH (m)	2.74	4.57	6.10	7.62	9.14	12.19	1.22	2.74	7.62	9.14
LINE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE	BURKE LANE
STATION	5+299.649	5+299.649	5+299.649	5+299.649	5+299.649	5+299.649	5+352.141	5+352.141	5+352.141	5+352.141
OFFSET (RT or LT)	9.45 LT	9.45 LT	9.45 LT	9.45 LT	9.45 LT	9.45 LT	2.08 RT	2.08 RT	2.08 RT	2.08 RT
ELEVATION (m)	1298.29	1298.29	1298.29	1298.29	1298.29	1298.29	1297.44	1297.44	1297.44	1297.44
SAMPLE TYPE	P	SPT	P	SPT	P	SPT	SPT	P	P	P
DATE SAMPLED	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/6/2000	2/6/2000	2/6/2000	2/6/2000
SOIL CLASSIFICATION (USCS)	ML	ML			ML	GP-GM	CL		ML	ML
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100				100				
NO. 4 (4760 microns)		100				53				
NO. 100 (147 microns)		95				13				
NO. 200 (74 microns)		81		85	77	10				49
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	26				23				28	23
WET UNIT WEIGHT (kN/m^3)	18.7				22.4				18.9	21.3
DRY UNIT WEIGHT (kN/m^3)	14.9				18.2				14.7	17.3
SPECIFIC GRAVITY	2.84	2.70			2.76	2.70			2.75	2.70
ATTERBERG LIMITS										
LIQUID LIMIT, LL		NP			24					
PLASTICITY INDEX, PI		NP			NP					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					39					46
TORVANE (kPa)	29		36		29			24	34	
CORROSION										
pH							7.6			
RESISTIVITY (ohm-cm)							3400			
WATER SOLUBLE SULFATE (ppm)							120			

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1136

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-30-352									
SAMPLE DEPTH (m)	12.19									
LINE	BURKE LANE									
STATION	5+352.141									
OFFSET (RT or LT)	2.08 RT									
ELEVATION (m)	1297.44									
SAMPLE TYPE	SPT									
DATE SAMPLED	2/6/2000									
SOIL CLASSIFICATION (USCS)	SP-SM									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	100									
NO. 100 (147 microns)	36									
NO. 200 (74 microns)	12									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)										
WET UNIT WEIGHT (kN/m^3)										
DRY UNIT WEIGHT (kN/m^3)										
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1137

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-31-353	SB-31-353	SB-31-353	SB-31-353	SB-31-353	SB-31-353	SB-31-353	SB-31-354	SB-31-354	SB-31-354
SAMPLE DEPTH (m)	1.22	7.32	11.89	13.41	24.38	27.43	30.48	0.00	1.52	4.57
LINE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE
STATION	99+835.873	99+835.873	99+835.873	99+835.873	99+835.873	99+835.873	99+835.873	100+033.967	100+033.967	100+033.967
OFFSET (RT or LT)	14.26 RT	14.26 RT	14.26 RT	14.26 RT	14.26 RT	14.26 RT	14.26 RT	0.00 LT	0.00 LT	0.00 LT
ELEVATION (m)	1284.58	1284.58	1284.58	1284.58	1284.58	1284.58	1284.58	1284.41	1284.41	1284.41
SAMPLE TYPE	SPT	SH	SH	SPT	SH	SPT	SH	SPT	P	P
DATE SAMPLED	4/3/2000	4/3/2000	4/3/2000	4/3/2000	4/3/2000	4/3/2000	4/3/2000	4/21/2000	4/21/2000	4/21/2000
SOIL CLASSIFICATION (USCS)	CL	SM	SM	SP	ML		CL	CL		CL
GROUP CLASSIFICATION (AASHTO)					A-4			A-6		
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100		100						
NO. 4 (4760 microns)		100		99						
NO. 100 (147 microns)		29		9						
NO. 200 (74 microns)		17	62	5		53				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			21				38			35
WET UNIT WEIGHT (kN/m^3)			20.9				17.7			19.0
DRY UNIT WEIGHT (kN/m^3)			17.2				12.8			14.0
SPECIFIC GRAVITY			2.73				2.69			2.73
ATTERBERG LIMITS										
LIQUID LIMIT, LL										47
PLASTICITY INDEX, PI										26
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			89				206			106
TORVANE (kPa)		14	72		27		67		19	77
CORROSION										
pH	9.4							8.7		
RESISTIVITY (ohm-cm)	1400							260		
WATER SOLUBLE SULFATE (ppm)	<250							320		

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1138

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354	SB-31-354
SAMPLE DEPTH (m)	7.32	10.36	13.41	17.98	21.03	24.08	30.48	36.58	42.67	48.77
LINE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE
STATION	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967	100+033.967
OFFSET (RT or LT)	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT
ELEVATION (m)	1284.41	1284.41	1284.41	1284.41	1284.41	1284.41	1284.41	1284.41	1284.41	1284.41
SAMPLE TYPE	P	P	P	P	SPT	P	P	P	P	P
DATE SAMPLED	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000
SOIL CLASSIFICATION (USCS)			CL	CL-ML	SP-SM	ML	CL			
GROUP CLASSIFICATION (AASHTO)				A-6	A-2-5	A-4	A-6			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING					100					
NO. 4 (4760 microns)					99					
NO. 100 (147 microns)					10					
NO. 200 (74 microns)			79		5					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			22							
WET UNIT WEIGHT (kN/m^3)			20.9							
DRY UNIT WEIGHT (kN/m^3)			17.1							
SPECIFIC GRAVITY			2.70							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			31							
PLASTICITY INDEX, PI			13							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			103							
TORVANE (kPa)	62	57	38	86		134	134	153	144	144
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1139

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00
Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-31-354	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355
SAMPLE DEPTH (m)	54.86	1.37	4.42	7.47	10.52	12.04	13.56	18.14	24.23	30.33
LINE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE
STATION	100+033.967	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967
OFFSET (RT or LT)	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT
ELEVATION (m)	1284.41	1284.33	1284.33	1284.33	1284.33	1284.33	1284.33	1284.33	1284.33	1284.33
SAMPLE TYPE	P	P	P	P	P	SPT	P	P	P	P
DATE SAMPLED	4/21/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000
SOIL CLASSIFICATION (USCS)	CL-ML		CH			CL		CL	CL	CL
GROUP CLASSIFICATION (AASHTO)	A-6		A-7-6						A-6	A-6
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)						59			94	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)								31	26	
WET UNIT WEIGHT (kN/m^3)								19.3	19.9	
DRY UNIT WEIGHT (kN/m^3)								14.7	15.8	
SPECIFIC GRAVITY									2.73	
ATTERBERG LIMITS										
LIQUID LIMIT, LL						32			30	
PLASTICITY INDEX, PI						16			10	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)								178		
TORVANE (kPa)	21	37	36	31	62		48	72	56	38
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1140

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-355	SB-31-356	SB-31-356	SB-31-356	SB-31-356	SB-31-356
SAMPLE DEPTH (m)	36.42	39.47	42.52	48.62	60.96	3.05	6.10	9.14	12.19	15.24
LINE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE	PED BRIDGE
STATION	100+075.967	100+075.967	100+075.967	100+075.967	100+075.967	100+118.329	100+118.329	100+118.329	100+118.329	100+118.329
OFFSET (RT or LT)	0.00 LT	0.00 LT	0.00 LT	0.00 LT	0.00 LT	8.80 RT	8.80 RT	8.80 RT	8.80 RT	8.80 RT
ELEVATION (m)	1284.33	1284.33	1284.33	1284.33	1284.33	1284.99	1284.99	1284.99	1284.99	1284.99
SAMPLE TYPE	P	SPT	P	P	SPT	SH	SH	SH	SH	SH
DATE SAMPLED	4/17/2000	4/17/2000	4/17/2000	4/17/2000	4/17/2000	3/30/2000	3/30/2000	3/30/2000	3/30/2000	3/30/2000
SOIL CLASSIFICATION (USCS)		CL	CL			CL	CL			
GROUP CLASSIFICATION (AASHTO)		A-7-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		81			30		89			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			26				37			
WET UNIT WEIGHT (kN/m^3)			20.1				18.7			
DRY UNIT WEIGHT (kN/m^3)			15.9				13.7			
SPECIFIC GRAVITY			2.77				2.73			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		45	47				38			
PLASTICITY INDEX, PI		23	27				16			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			110				73			
TORVANE (kPa)	57		38	40		120	48	43	53	53
CORROSION										
pH						9.0				
RESISTIVITY (ohm-cm)						810				
WATER SOLUBLE SULFATE (ppm)						90				

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1141

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-31-356	SB-31-356								
SAMPLE DEPTH (m)	18.29	27.43								
LINE	PED BRIDGE	PED BRIDGE								
STATION	100+118.329	100+118.329								
OFFSET (RT or LT)	8.80 RT	8.80 RT								
ELEVATION (m)	1284.99	1284.99								
SAMPLE TYPE	SH	SH								
DATE SAMPLED	3/30/2000	3/30/2000								
SOIL CLASSIFICATION (USCS)	CH									
GROUP CLASSIFICATION (AASHTO)	A-7-6									
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	97									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	30									
WET UNIT WEIGHT (kN/m^3)	18.9									
DRY UNIT WEIGHT (kN/m^3)	14.6									
SPECIFIC GRAVITY	2.74									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	66									
PLASTICITY INDEX, PI	37									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	64									
TORVANE (kPa)	43	67								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1142

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	SB-32-357	SB-32-357	SB-32-357	SB-32-357	SB-32-357	SB-32-357	SB-32-357	SB-32-357	SB-32-357	
SAMPLE DEPTH (m)	1.52	4.57	9.14	12.19	15.24	21.34	27.43	39.62	41.15	
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	
STATION	6002+535.900	6002+535.900	6002+535.900	6002+535.900	6002+535.900	6002+535.900	6002+535.900	6002+535.900	6002+535.900	
OFFSET (RT or LT)	21.40 LT	21.40 LT	21.40 LT	21.40 LT	21.40 LT	21.40 LT	21.40 LT	21.40 LT	21.40 LT	
ELEVATION (m)	1284.55	1284.55	1284.55	1284.55	1284.55	1284.55	1284.55	1284.55	1284.55	
SAMPLE TYPE	SH	SH	SH	SH	SH	SH	SH	SPT	SPT	
DATE SAMPLED	5/5/2000	5/5/2000	5/5/2000	5/5/2000	5/5/2000	5/5/2000	5/5/2000	5/5/2000	5/5/2000	
SOIL CLASSIFICATION (USCS)		CH	ML		CL	CL			SM	
GROUP CLASSIFICATION (AASHTO)						A-7-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING									100	
NO. 4 (4760 microns)									97	
NO. 100 (147 microns)									36	
NO. 200 (74 microns)	90		70					63	25	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		41	28		28	38				
WET UNIT WEIGHT (kN/m^3)		17.9	18.8		19.4	18.5				
DRY UNIT WEIGHT (kN/m^3)		12.7	14.7		15.1	13.5				
SPECIFIC GRAVITY			3.12		2.80	2.81				
ATTERBERG LIMITS										
LIQUID LIMIT, LL			NP		36	44				
PLASTICITY INDEX, PI			NP		15	23				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		39				43				
TORVANE (kPa)	43	24	19	36	34	29	48			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1143

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 1-240	WB- 1-240								
SAMPLE DEPTH (m)	6.10	12.80								
LINE	I-15	I-15								
STATION	59+493.295	59+493.295								
OFFSET (RT or LT)	70.03 LT	70.03 LT								
ELEVATION (m)	1296.65	1296.65								
SAMPLE TYPE	MC	SPT								
DATE SAMPLED	01/12/2000	01/12/2000								
SOIL CLASSIFICATION (USCS)	ML	SP-SM								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100								
NO. 4 (4760 microns)		100								
NO. 100 (147 microns)		11								
NO. 200 (74 microns)	79	6								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27	21								
WET UNIT WEIGHT (kN/m^3)										
DRY UNIT WEIGHT (kN/m^3)										
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL		33								
PLASTICITY INDEX, PI		13								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSLIM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1144

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 2-241	WB- 2-241	WB- 2-241	WB- 2-241	WB- 2-241					
SAMPLE DEPTH (m)	7.62	9.14	10.67	12.19	13.72					
LINE	I-15	I-15	I-15	I-15	I-15					
STATION	59+647.927	59+647.927	59+647.927	59+647.927	59+647.927					
OFFSET (RT or LT)	57.07 LT	57.07 LT	57.07 LT	57.07 LT	57.07 LT					
ELEVATION (m)	1299.53	1299.53	1299.53	1299.53	1299.53					
SAMPLE TYPE	SH	MC	SH	MC	SH					
DATE SAMPLED	01/13/2000	01/13/2000	01/13/2000	01/13/2000	01/13/2000					
SOIL CLASSIFICATION (USCS)	ML		CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	79									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	23									
WET UNIT WEIGHT (kN/m^3)	20.7									
DRY UNIT WEIGHT (kN/m^3)	16.8									
SPECIFIC GRAVITY	2.73									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	28		32							
PLASTICITY INDEX, PI	6		10							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	83									
TORVANE (kPa)	38	57	53	57	62					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1145

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 3-242	WB- 3-242	WB- 3-242							
SAMPLE DEPTH (m)	6.10	9.14	12.19							
LINE	I-15	I-15	I-15							
STATION	59+706.550	59+706.550	59+706.550							
OFFSET (RT or LT)	29.93 LT	29.93 LT	29.93 LT							
ELEVATION (m)	1298.22	1298.22	1298.22							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	01/12/2000	01/12/2000	01/12/2000							
SOIL CLASSIFICATION (USCS)	ML									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	26									
WET UNIT WEIGHT (kN/m^3)	19.8									
DRY UNIT WEIGHT (kN/m^3)	15.7									
SPECIFIC GRAVITY	2.74									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	25									
PLASTICITY INDEX, PI	1									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	29	38	57							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1146

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 4-239	WB- 4-239								
SAMPLE DEPTH (m)	4.57	6.71								
LINE	I-15	I-15								
STATION	59+480.935	59+480.935								
OFFSET (RT or LT)	39.09 LT	39.09 LT								
ELEVATION (m)	1296.34	1296.34								
SAMPLE TYPE	MC	SPT								
DATE SAMPLED	01/11/2000	01/11/2000								
SOIL CLASSIFICATION (USCS)	SM	SP-SM								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100								
NO. 4 (4760 microns)		100								
NO. 100 (147 microns)		20								
NO. 200 (74 microns)	18	11								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	20									
WET UNIT WEIGHT (kN/m^3)										
DRY UNIT WEIGHT (kN/m^3)										
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1147

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 9-226	WB- 9-226	WB- 9-226	WB- 9-228	WB- 9-228	WB- 9-228				
SAMPLE DEPTH (m)	3.05	6.10	10.67	3.05	6.71	9.75				
LINE	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB				
STATION	1+406.133	1+406.133	1+406.133	1+608.843	1+608.843	1+608.843				
OFFSET (RT or LT)	1.01 RT	1.01 RT	1.01 RT	8.56 RT	8.56 RT	8.56 RT				
ELEVATION (m)	1298.21	1298.21	1298.21	1298.80	1298.80	1298.80				
SAMPLE TYPE	SH	MC	MC	MC	SPT	SPT				
DATE SAMPLED	01/10/2000	01/10/2000	01/10/2000	01/07/2000	01/07/2000	01/07/2000				
SOIL CLASSIFICATION (USCS)	CL	GM	SP-SM	ML	SM	SM				
GROUP CLASSIFICATION (AASHTO)	A-7-6		A-3			A-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100	100		100	100				
NO. 4 (4760 microns)		48	100		99	69				
NO. 100 (147 microns)		17	17		49	35				
NO. 200 (74 microns)	92	13	7	30	19	22				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	32	9		31						
WET UNIT WEIGHT (kN/m^3)	18.8	23.8		18.4						
DRY UNIT WEIGHT (kN/m^3)	14.2	22.0		14.1						
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL	47			33						
PLASTICITY INDEX, PI	21			9						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	52									
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1148

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB- 9-229	WB- 9-229	WB- 9-229	WB- 9-229	WB- 9-229	WB- 9-231	WB- 9-231			
SAMPLE DEPTH (m)	3.05	4.57	6.10	9.14	13.72	4.57	7.62			
LINE	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB	I-I5 NB/89 NB			
STATION	1+719.031	1+719.031	1+719.031	1+719.031	1+719.031	1+9203.608	1+9203.608			
OFFSET (RT or LT)	12.69 RT	12.69 RT	12.69 RT	12.69 RT	12.69 RT	44.42 RT	44.42 RT			
ELEVATION (m)	1298.98	1298.98	1298.98	1298.98	1298.98	1302.34	1302.34			
SAMPLE TYPE	P	MC	MC	MC	MC	SH	SH			
DATE SAMPLED	01/07/2000	01/07/2000	01/07/2000	01/07/2000	01/07/2000	03/28/2000	03/28/2000			
SOIL CLASSIFICATION (USCS)	CL	SM	GW-GM	SM	SM		CL			
GROUP CLASSIFICATION (AASHTO)	A-6	A-2-5								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100	100		100					
NO. 4 (4760 microns)		96	49		76					
NO. 100 (147 microns)		27	15		23					
NO. 200 (74 microns)	62	16	11	35	16	17				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		24	7	17	10		33			
WET UNIT WEIGHT (kN/m^3)		19.7	22.6	20.5	22.0		19.1			
DRY UNIT WEIGHT (kN/m^3)		15.8	21.1	17.6	20.0		14.4			
SPECIFIC GRAVITY							2.80			
ATTERBERG LIMITS										
LIQUID LIMIT, LL							35			
PLASTICITY INDEX, PI							15			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)							73			
TORVANE (kPa)						24	43			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1149

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-10-233	WB-10-233	WB-10-233	WB-10-233	WB-10-234	WB-10-234	WB-10-234	WB-10-234	WB-10-234	
SAMPLE DEPTH (m)	3.05	6.10	6.71	9.75	0.61	2.13	3.66	9.75	14.33	
LINE	I-15	I-15	I-15	I-15	I-15	I-15	I-15	I-15	I-15	
STATION	85+881.649	85+881.649	85+881.649	85+881.649	59+019.306	59+019.306	59+019.306	59+019.306	59+019.306	
OFFSET (RT or LT)	1.16 RT	1.16 RT	1.16 RT	1.16 RT	27.99 RT	27.99 RT	27.99 RT	27.99 RT	27.99 RT	
ELEVATION (m)	1301.04	1301.04	1301.04	1301.04	1298.52	1298.52	1298.52	1298.52	1298.52	
SAMPLE TYPE	SH	SH	SPT	SPT	SPT	SPT	MC	SPT	SPT	
DATE SAMPLED	01/07/2000	01/07/2000	01/07/2000	01/07/2000	01/10/2000	01/10/2000	01/10/2000	01/10/2000	01/10/2000	
SOIL CLASSIFICATION (USCS)	MH	CL	SP-SM	SM	ML			SM	SP	
GROUP CLASSIFICATION (AASHTO)			A-2-5		A-4			A-2-5		
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING			100	100					100	
NO. 4 (4760 microns)			82	91					89	
NO. 100 (147 microns)			11	26					9	
NO. 200 (74 microns)			7	22	22	5			5	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	36	28								
WET UNIT WEIGHT (kN/m^3)	18.6	19.5								
DRY UNIT WEIGHT (kN/m^3)	13.9	15.2								
SPECIFIC GRAVITY	2.73	2.53								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	50									
PLASTICITY INDEX, PI	21									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	69									
TORVANE (kPa)	48	34					43	34		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1150

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-10-236	WB-10-236	WB-10-236	WB-10-236	WB-10-236	WB-10-236				
SAMPLE DEPTH (m)	0.00	3.05	3.66	4.57	6.71	9.14				
LINE	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB				
STATION	71+721.381	71+721.381	71+721.381	71+721.381	71+721.381	71+721.381				
OFFSET (RT or LT)	20.11 LT	20.11 LT	20.11 LT	20.11 LT	20.11 LT	20.11 LT				
ELEVATION (m)	1297.74	1297.74	1297.74	1297.74	1297.74	1297.74				
SAMPLE TYPE	MC	SH	SPT	MC	SPT	SH				
DATE SAMPLED	01/10/2000	01/10/2000	01/10/2000	01/10/2000	01/10/2000	01/10/2000				
SOIL CLASSIFICATION (USCS)	SP-SM	CL	SM	SM		SM				
GROUP CLASSIFICATION (AASHTO)	A-1-b		A-2-5							
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING				100						
NO. 4 (4760 microns)				94						
NO. 100 (147 microns)				40						
NO. 200 (74 microns)	9		20	28	9					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		18		6		26				
WET UNIT WEIGHT (kN/m^3)		20.0		22.1		19.7				
DRY UNIT WEIGHT (kN/m^3)		17.0		20.8		15.6				
SPECIFIC GRAVITY		2.79								
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)		19				29				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1151

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-14-238	WB-14-238	WB-14-238	WB-14-238	WB-14-238					
SAMPLE DEPTH (m)	1.52	2.13	4.57	7.62	10.67					
LINE	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB	US89 SB/LP SB					
STATION	71+998.327	71+998.327	71+998.327	71+998.327	71+998.327					
OFFSET (RT or LT)	23.07 RT	23.07 RT	23.07 RT	23.07 RT	23.07 RT					
ELEVATION (m)	1298.63	1298.63	1298.63	1298.63	1298.63					
SAMPLE TYPE	MC	SPT	SH	SH	SH					
DATE SAMPLED	01/11/2000	01/11/2000	01/11/2000	01/11/2000	01/11/2000					
SOIL CLASSIFICATION (USCS)	SM		ML	ML	ML					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	98									
NO. 100 (147 microns)	57									
NO. 200 (74 microns)	41	23	89							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			25	22	22					
WET UNIT WEIGHT (kN/m^3)			20.0	20.4	21.4					
DRY UNIT WEIGHT (kN/m^3)			16.0	16.8	17.6					
SPECIFIC GRAVITY			2.73	2.71	2.78					
ATTERBERG LIMITS										
LIQUID LIMIT, LL			25							
PLASTICITY INDEX, PI			4							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			120		240					
TORVANE (kPa)			43	57	81					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1152

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-15-219b	WB-15-219b	WB-15-219b	WB-15-219b	WB-15-219b	WB-15-219b	WB-15-219b			
SAMPLE DEPTH (m)	6.10	7.62	9.14	10.67	13.72	15.24	25.91			
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE			
STATION	6013+879.882	6013+879.882	6013+879.882	6013+879.882	6013+879.882	6013+879.882	6013+879.882			
OFFSET (RT or LT)	34.51 RT	34.51 RT	34.51 RT	34.51 RT	34.51 RT	34.51 RT	34.51 RT			
ELEVATION (m)	1286.31	1286.31	1286.31	1286.31	1286.31	1286.31	1286.31			
SAMPLE TYPE	MC	P	MC	P	P	MC	P			
DATE SAMPLED	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999			
SOIL CLASSIFICATION (USCS)		CL		CL	CL		CH			
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		98								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		42		43	63		49			
WET UNIT WEIGHT (kN/m^3)		17.5		17.6	15.6		16.8			
DRY UNIT WEIGHT (kN/m^3)		12.3		12.3	9.6		11.3			
SPECIFIC GRAVITY		2.71		2.80			2.79			
ATTERBERG LIMITS										
LIQUID LIMIT, LL				40			60			
PLASTICITY INDEX, PI				19			34			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		128								
TORVANE (kPa)	62	24	38	29	77	41	65			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1153

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-16-222b	WB-16-222b	WB-16-222b	WB-16-224	WB-16-224	WB-16-224				
SAMPLE DEPTH (m)	3.05	6.10	7.62	7.62	10.67	12.19				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6014+082.036	6014+082.036	6014+082.036	6014+367.880	6014+367.880	6014+367.880				
OFFSET (RT or LT)	62.01 RT	62.01 RT	62.01 RT	32.77 RT	32.77 RT	32.77 RT				
ELEVATION (m)	1286.11	1286.11	1286.11	1286.11	1286.11	1286.11				
SAMPLE TYPE	SH	SH	P	SH	SH	SH				
DATE SAMPLED	12/21/1999	12/21/1999	12/21/1999	12/28/2000	12/28/2000	12/28/2000				
SOIL CLASSIFICATION (USCS)	CL	CL	CL	CL		ML				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100	100								
NO. 4 (4760 microns)	100	100								
NO. 100 (147 microns)	99	95								
NO. 200 (74 microns)	96	67	98	98						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	24	46	42	44		44				
WET UNIT WEIGHT (kN/m^3)	20.6	17.2	18.5	17.7		17.7				
DRY UNIT WEIGHT (kN/m^3)	16.6	11.8	13.0	12.4		12.3				
SPECIFIC GRAVITY		2.81		2.76		2.71				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	34	34				40				
PLASTICITY INDEX, PI	16	11				11				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	209		37							
TORVANE (kPa)			5	14	30	29				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1154

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-16-225	WB-16-225	WB-16-225	WB-16-225	WB-16-225					
SAMPLE DEPTH (m)	3.05	4.57	8.23	9.14	13.72					
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE					
STATION	6014+509.641	6014+509.641	6014+509.641	6014+509.641	6014+509.641					
OFFSET (RT or LT)	35.7 RT	35.7 RT	35.7 RT	35.7 RT	35.7 RT					
ELEVATION (m)	1286.66	1286.66	1286.66	1286.66	1286.66					
SAMPLE TYPE	MC	MC	P	MC	SH					
DATE SAMPLED	12/22/1999	12/22/1999	12/22/1999	12/22/1999	12/22/1999					
SOIL CLASSIFICATION (USCS)			CH							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			92							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			42							
WET UNIT WEIGHT (kN/m^3)			18.4							
DRY UNIT WEIGHT (kN/m^3)			13.0							
SPECIFIC GRAVITY			2.86							
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			59							
TORVANE (kPa)	48	38		10	24					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1155

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-17-213b	WB-17-213b	WB-17-213b	WB-17-213b						
SAMPLE DEPTH (m)	6.10	10.67	18.29	27.43						
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE						
STATION	6013+894.559	6013+894.559	6013+894.559	6013+894.559						
OFFSET (RT or LT)	22.53 LT	22.53 LT	22.53 LT	22.53 LT						
ELEVATION (m)	1286.03	1286.03	1286.03	1286.03						
SAMPLE TYPE	SH	P	P	P						
DATE SAMPLED	12/21/2000	12/21/2000	12/21/2000	12/21/2000						
SOIL CLASSIFICATION (USCS)		MH	CL	ML						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		99	98							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		39	37	31						
WET UNIT WEIGHT (kN/m^3)			18.3							
DRY UNIT WEIGHT (kN/m^3)			13.3							
SPECIFIC GRAVITY			2.64							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		58		37						
PLASTICITY INDEX, PI		20		10						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	24	14	65	19						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1156

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-17-215	WB-17-215	WB-17-215	WB-17-215	WB-17-215	WB-17-215	WB-17-215	WB-17-215		
SAMPLE DEPTH (m)	1.52	3.05	4.57	6.10	7.62	9.14	12.80	14.33		
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE		
STATION	6014+082.307	6014+082.307	6014+082.307	6014+082.307	6014+082.307	6014+082.307	6014+082.307	6014+082.307		
OFFSET (RT or LT)	18.03 LT	18.03 LT	18.03 LT	18.03 LT	18.03 LT	18.03 LT	18.03 LT	18.03 LT		
ELEVATION (m)	1284.42	1284.42	1284.42	1284.42	1284.42	1284.42	1284.42	1284.42		
SAMPLE TYPE	SH	MC	SH	MC	SH	MC	SH	MC		
DATE SAMPLED	12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999		
SOIL CLASSIFICATION (USCS)	CL		CL		CH		CL			
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	99									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	25		32		52		48			
WET UNIT WEIGHT (kN/m^3)	20.1		18.8		16.1		16.6			
DRY UNIT WEIGHT (kN/m^3)	16.0		14.2		10.6		11.2			
SPECIFIC GRAVITY			2.78		2.73		2.71			
ATTERBERG LIMITS										
LIQUID LIMIT, LL	46				56					
PLASTICITY INDEX, PI	23				31					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	231									
TORVANE (kPa)	38	86	50	29	37	19	56	33		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1157

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-18-216	WB-18-216	WB-18-216	WB-18-216	WB-18-218	WB-18-218	WB-18-218	WB-18-218	WB-18-218	WB-18-218
SAMPLE DEPTH (m)	3.05	4.57	6.10	9.14	1.52	1.98	3.51	3.66	4.57	6.55
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6014+224.874	6014+224.874	6014+224.874	6014+224.874	6014+451.631	6014+451.631	6014+451.631	6014+451.631	6014+451.631	6014+451.631
OFFSET (RT or LT)	27.78 LT	27.78 LT	27.78 LT	27.78 LT	52.3 LT	52.3 LT	52.3 LT	52.3 LT	52.3 LT	52.3 LT
ELEVATION (m)	1284.50	1284.50	1284.50	1284.50	1284.89	1284.89	1284.89	1284.89	1284.89	1284.89
SAMPLE TYPE	SH	MC	SH	SH	MC			SPT	SH	
DATE SAMPLED	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/22/2000	12/22/2000	12/22/2000	12/22/2000	12/22/2000	12/22/2000
SOIL CLASSIFICATION (USCS)	CL		CL	CL	CL				CL	
GROUP CLASSIFICATION (AASHTO)					A-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING				100						
NO. 4 (4760 microns)				100						
NO. 100 (147 microns)				97						
NO. 200 (74 microns)	97			95					97	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	23		43	58					39	
WET UNIT WEIGHT (kN/m^3)	20.4		16.5	15.5					17.0	
DRY UNIT WEIGHT (kN/m^3)	16.6		11.5	9.8					12.2	
SPECIFIC GRAVITY	2.81		2.78	2.69					2.78	
ATTERBERG LIMITS										
LIQUID LIMIT, LL				41					42	
PLASTICITY INDEX, PI				20					21	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	56	96	36	31	48	48	72	57		29
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1158

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 8/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-18-218	WB-18-218	WB-18-218	WB-18-218	WB-18-218	WB-18-218				
SAMPLE DEPTH (m)	6.71	7.62	9.45	10.67	12.34	12.50				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6014+451.631	6014+451.631	6014+451.631	6014+451.631	6014+451.631	6014+451.631				
OFFSET (RT or LT)	52.3 LT	52.3 LT	52.3 LT	52.3 LT	52.3 LT	52.3 LT				
ELEVATION (m)	1284.89	1284.89	1284.89	1284.89	1284.89	1284.89				
SAMPLE TYPE	SPT	SH	MC	P						
DATE SAMPLED	12/22/2000	12/22/2000	12/22/2000	12/22/2000	12/22/2000	12/22/2000				
SOIL CLASSIFICATION (USCS)		CL		CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		96		98						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		43		44						
WET UNIT WEIGHT (kN/m^3)		17.4		17.3						
DRY UNIT WEIGHT (kN/m^3)		12.2		12.0						
SPECIFIC GRAVITY				2.72						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		47								
PLASTICITY INDEX, PI		21								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		16								
TORVANE (kPa)	19		10		29	38				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1159

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-19-212	WB-19-212	WB-19-212	WB-19-212	WB-19-212	WB-19-212	WB-19-212			
SAMPLE DEPTH (m)	1.52	4.57	6.10	7.62	9.14	10.67	12.19			
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE			
STATION	6013+678.755	6013+678.755	6013+678.755	6013+678.755	6013+678.755	6013+678.755	6013+678.755			
OFFSET (RT or LT)	21.98 RT	21.98 RT	21.98 RT	21.98 RT	21.98 RT	21.98 RT	21.98 RT			
ELEVATION (m)	1285.52	1285.52	1285.52	1285.52	1285.52	1285.52	1285.52			
SAMPLE TYPE	MC	MC	SH	MC	SH	MC	SH			
DATE SAMPLED	12/23/2000	12/23/2000	12/23/2000	12/23/2000	12/23/2000	12/23/2000	12/23/2000			
SOIL CLASSIFICATION (USCS)			CL		CL					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			97							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			34		47					
WET UNIT WEIGHT (kN/m^3)			18.4		18.0					
DRY UNIT WEIGHT (kN/m^3)			13.8		12.3					
SPECIFIC GRAVITY			2.69		2.68					
ATTERBERG LIMITS										
LIQUID LIMIT, LL			43		39					
PLASTICITY INDEX, PI			20		17					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	77	81	41	34	19	86	36			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1160

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-20-209	WB-20-209	WB-20-209	WB-20-209	WB-20-209	WB-20-209	WB-20-209	WB-20-210	WB-20-210	WB-20-210
SAMPLE DEPTH (m)	1.52	3.05	5.18	6.10	7.62	9.14	12.19	3.05	7.62	9.14
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+371.756	6013+371.756	6013+371.756	6013+371.756	6013+371.756	6013+371.756	6013+371.756	6013+468.564	6013+468.564	6013+468.564
OFFSET (RT or LT)	52.2 RT	52.2 RT	52.2 RT	52.2 RT	52.2 RT	52.2 RT	52.2 RT	40.59 RT	40.59 RT	40.59 RT
ELEVATION (m)	1287.15	1287.15	1287.15	1287.15	1287.15	1287.15	1287.15	1285.55	1285.55	1285.55
SAMPLE TYPE	MC	SH	SPT	SH	MC	SH	SH	P	P	P
DATE SAMPLED	12/28/2000	12/28/2000	12/28/2000	12/28/2000	12/28/2000	12/28/2000	12/28/2000	12/27/1999	12/27/1999	12/27/1999
SOIL CLASSIFICATION (USCS)		CL		CL		CL	CL	CL	CL	
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)				98		99	97	87		
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				28		48	30	29	51	
WET UNIT WEIGHT (kN/m^3)				19.6		17.2	19.2	19.7	17.0	
DRY UNIT WEIGHT (kN/m^3)				15.3		11.6	14.8	15.2	11.2	
SPECIFIC GRAVITY				2.81		2.77	2.71	2.80		
ATTERBERG LIMITS										
LIQUID LIMIT, LL		36						39		
PLASTICITY INDEX, PI		15						16		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				164					94	
TORVANE (kPa)	57	98	101	67	57	37	42	57	53	57
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1161

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-20-210	WB-20-211	WB-20-211	WB-20-211	WB-20-211	WB-20-211	WB-20-211	WB-20-211	WB-20-211	WB-20-211
SAMPLE DEPTH (m)	13.87	0.00	1.52	3.05	4.57	6.10	7.62	11.28	12.19	13.72
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE
STATION	6013+468.564	6013+568.805	6013+568.805	6013+568.805	6013+568.805	6013+568.805	6013+568.805	6013+568.805	6013+568.805	6013+568.805
OFFSET (RT or LT)	40.59 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT	46.61 RT
ELEVATION (m)	1285.55	1285.74	1285.74	1285.74	1285.74	1285.74	1285.74	1285.74	1285.74	1285.74
SAMPLE TYPE	SH	MC	P	MC	P	MC	P	MC	P	MC
DATE SAMPLED	12/27/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999	12/29/1999
SOIL CLASSIFICATION (USCS)		ML	CL		CL	CH	CH			
GROUP CLASSIFICATION (AASHTO)		A-4				A-7-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			98							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			26		42		61			
WET UNIT WEIGHT (kN/m^3)			19.2		17.8		16.3			
DRY UNIT WEIGHT (kN/m^3)			15.3		12.6		10.1			
SPECIFIC GRAVITY			2.82		2.73		2.72			
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	48	24	63	48	79	31	38	67	53	48
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1162

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-20-211	WB-20-211	WB-20-211	WB-20-211						
SAMPLE DEPTH (m)	15.24	18.29	19.81	24.99						
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE						
STATION	6013+568.805	6013+568.805	6013+568.805	6013+568.805						
OFFSET (RT or LT)	46.61 RT	46.61 RT	46.61 RT	46.61 RT						
ELEVATION (m)	1285.74	1285.74	1285.74	1285.74						
SAMPLE TYPE	P	P	MC	MC						
DATE SAMPLED	12/29/1999	12/29/1999	12/29/1999	12/29/1999						
SOIL CLASSIFICATION (USCS)	CH	CL								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	100									
NO. 100 (147 microns)	91									
NO. 200 (74 microns)	89									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	36	31								
WET UNIT WEIGHT (kN/m^3)	19.2	19.1								
DRY UNIT WEIGHT (kN/m^3)	14.1	14.6								
SPECIFIC GRAVITY	2.70	2.71								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	55	46								
PLASTICITY INDEX, PI	28	24								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	38	127	34	48						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1163

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-21-205	WB-21-205								
SAMPLE DEPTH (m)	3.05	6.10								
LINE	D MAINLINE	D MAINLINE								
STATION	6013+102.889	6013+102.889								
OFFSET (RT or LT)	57.21	57.21								
ELEVATION (m)	1285.42	1285.42								
SAMPLE TYPE	SH	SH								
DATE SAMPLED	01/03/2000	01/03/2000								
SOIL CLASSIFICATION (USCS)		CL								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		100								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		37								
WET UNIT WEIGHT (kN/m^3)		18.4								
DRY UNIT WEIGHT (kN/m^3)		13.5								
SPECIFIC GRAVITY		2.76								
ATTERBERG LIMITS										
LIQUID LIMIT, LL		40								
PLASTICITY INDEX, PI		18								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	84	38								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1164

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 8/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-22-206	WB-22-206	WB-22-206	WB-22-206	WB-22-206	WB-22-206	WB-22-206	WB-22-206	WB-22-206	
SAMPLE DEPTH (m)	3.05	4.57	6.10	7.62	9.14	9.75	10.67	12.19	13.72	
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	
STATION	6013+740.032	6013+740.032	6013+740.032	6013+740.032	6013+740.032	6013+740.032	6013+740.032	6013+740.032	6013+740.032	
OFFSET (RT or LT)	27.2 LT	27.2 LT	27.2 LT	27.2 LT	27.2 LT	27.2 LT	27.2 LT	27.2 LT	27.2 LT	
ELEVATION (m)	1284.97	1284.97	1284.97	1284.97	1284.97	1284.97	1284.97	1284.97	1284.97	
SAMPLE TYPE	P	MC	P	MC	P	SPT	MC	P	MC	
DATE SAMPLED	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999	
SOIL CLASSIFICATION (USCS)	CL				CL			CL		
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	98					97				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	19				35			53		
WET UNIT WEIGHT (kN/m^3)	20.1				18.3			16.3		
DRY UNIT WEIGHT (kN/m^3)	16.9				13.6			10.6		
SPECIFIC GRAVITY	2.82				2.78			2.66		
ATTERBERG LIMITS										
LIQUID LIMIT, LL								40		
PLASTICITY INDEX, PI								21		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	144	96	67	96	35		48	29	53	
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1165

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-22-208	WB-22-208	WB-22-208	WB-22-208	WB-22-208	WB-22-208				
SAMPLE DEPTH (m)	2.13	3.35	7.62	9.45	13.72	14.33				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6013+563.430	6013+563.430	6013+563.430	6013+563.430	6013+563.430	6013+563.430				
OFFSET (RT or LT)	26.77 LT	26.77 LT	26.77 LT	26.77 LT	26.77 LT	26.77 LT				
ELEVATION (m)	1284.64	1284.64	1284.64	1284.64	1284.64	1284.64				
SAMPLE TYPE	SPT	MC	MC	SPT	P	MC				
DATE SAMPLED	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000				
SOIL CLASSIFICATION (USCS)				SM	CL					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING				100						
NO. 4 (4760 microns)				100						
NO. 100 (147 microns)				26						
NO. 200 (74 microns)				17	94					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)					41					
WET UNIT WEIGHT (kN/m^3)					18.0					
DRY UNIT WEIGHT (kN/m^3)					12.7					
SPECIFIC GRAVITY					2.74					
ATTERBERG LIMITS										
LIQUID LIMIT, LL					45					
PLASTICITY INDEX, PI					21					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	86	57	29			19				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1166

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-24-202	WB-24-202	WB-24-202	WB-24-202	WB-24-202	WB-24-202	WB-24-202	WB-24-202	WB-24-202	
SAMPLE DEPTH (m)	0.00	3.05	4.57	6.10	7.62	9.14	10.67	12.19	14.33	
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	
STATION	6012+874.145	6012+874.145	6012+874.145	6012+874.145	6012+874.145	6012+874.145	6012+874.145	6012+874.145	6012+874.145	
OFFSET (RT or LT)	36.01 LT	36.01 LT	36.01 LT	36.01 LT	36.01 LT	36.01 LT	36.01 LT	36.01 LT	36.01 LT	
ELEVATION (m)	1284.37	1284.37	1284.37	1284.37	1284.37	1284.37	1284.37	1284.37	1284.37	
SAMPLE TYPE	MC	MC	SH	MC	MC	SH	MC	MC	SPT	
DATE SAMPLED	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	01/04/2000	
SOIL CLASSIFICATION (USCS)			CL			CH			SW-SM	
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING						100			100	
NO. 4 (4760 microns)						100			100	
NO. 100 (147 microns)						100			10	
NO. 200 (74 microns)			99			100			6	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			35			54				
WET UNIT WEIGHT (kN/m^3)			19.0			17.3				
DRY UNIT WEIGHT (kN/m^3)			14.1			11.3				
SPECIFIC GRAVITY			2.73							
ATTERBERG LIMITS										
LIQUID LIMIT, LL						65				
PLASTICITY INDEX, PI						37				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			90			60				
TORVANE (kPa)	72	86		34	62		24	57		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1167

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-24-204	WB-24-204	WB-24-204							
SAMPLE DEPTH (m)	4.57	7.62	9.14							
LINE	D MAINLINE	D MAINLINE	D MAINLINE							
STATION	6013+186.647	6013+186.647	6013+186.647							
OFFSET (RT or LT)	42.51 LT	42.51 LT	42.51 LT							
ELEVATION (m)	1285.57	1285.57	1285.57							
SAMPLE TYPE	MC	SH	MC							
DATE SAMPLED	12/28/1999	12/28/1999	12/28/1999							
SOIL CLASSIFICATION (USCS)		CH								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		98								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		54								
WET UNIT WEIGHT (kN/m^3)		16.6								
DRY UNIT WEIGHT (kN/m^3)		10.8								
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL		68								
PLASTICITY INDEX, PI		37								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	86		62							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1168

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-25-200	WB-25-201	WB-25-201	WB-25-201	WB-25-201					
SAMPLE DEPTH (m)	5.18	1.52	6.10	9.14	12.19					
LINE	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB					
STATION	50+774.766	50+871420	50+871420	50+871420	50+871420					
OFFSET (RT or LT)	9.87 LT	29.02 LT	29.02 LT	29.02 LT	29.02 LT					
ELEVATION (m)	1285.10	1285.27	1285.27	1285.27	1285.27					
SAMPLE TYPE	SH	SH	SH	SH	SH					
DATE SAMPLED	01/19/2000	01/19/2000	01/19/2000	01/19/2000	01/19/2000					
SOIL CLASSIFICATION (USCS)	CL		CL	CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	96			99						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			48	39						
WET UNIT WEIGHT (kN/m^3)			17.0	19.0						
DRY UNIT WEIGHT (kN/m^3)			11.5	13.7						
SPECIFIC GRAVITY			2.75							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	36		36							
PLASTICITY INDEX, PI	14		12							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				50						
TORVANE (kPa)		43	24	38	29					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1169

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-26-314	WB-26-314	WB-26-314							
SAMPLE DEPTH (m)	1.52	6.10	12.19							
LINE	D MAINLINE	D MAINLINE	D MAINLINE							
STATION	6002+387.809	6002+387.809	6002+387.809							
OFFSET (RT or LT)	1.33 RT	1.33 RT	1.33 RT							
ELEVATION (m)	1287.20	1287.20	1287.20							
SAMPLE TYPE	MC	P	P							
DATE SAMPLED	01/21/2000	01/21/2000	01/21/2000							
SOIL CLASSIFICATION (USCS)		CH	CL-ML							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	91									
NO. 100 (147 microns)	60									
NO. 200 (74 microns)	42									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	10	62	29							
WET UNIT WEIGHT (kN/m^3)	21.1	16.6	19.0							
DRY UNIT WEIGHT (kN/m^3)	19.2	10.2	14.7							
SPECIFIC GRAVITY		2.76	2.72							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		51	28							
PLASTICITY INDEX, PI		22	6							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		49								
TORVANE (kPa)		34	34							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1170

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-27-317	WB-27-317	WB-27-317							
SAMPLE DEPTH (m)	1.52	4.57	12.19							
LINE	Rdwd/I-15 SB	Rdwd/I-15 SB	Rdwd/I-15 SB							
STATION	55+591.440	55+591.440	55+591.440							
OFFSET (RT or LT)	4.18 LT	4.18 LT	4.18 LT							
ELEVATION (m)	1285.92	1285.92	1285.92							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	01/18/2000	01/18/2000	01/18/2000							
SOIL CLASSIFICATION (USCS)	ML	CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	32	47	34							
WET UNIT WEIGHT (kN/m^3)	18.9	17.2	18.9							
DRY UNIT WEIGHT (kN/m^3)	14.3	11.7	14.1							
SPECIFIC GRAVITY		2.73	2.73							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		40								
PLASTICITY INDEX, PI		16								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	69	32								
TORVANE (kPa)	48	24	43							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1171

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-28-319	WB-28-319								
SAMPLE DEPTH (m)	1.52	4.57								
LINE	Rdwd/I-15 SB	Rdwd/I-15 SB								
STATION	55+406.081	55+406.081								
OFFSET (RT or LT)	33.38 LT	33.38 LT								
ELEVATION (m)	1285.21	1285.21								
SAMPLE TYPE	P	P								
DATE SAMPLED	01/18/2000	01/18/2000								
SOIL CLASSIFICATION (USCS)	ML									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	34									
WET UNIT WEIGHT (kN/m^3)	18.8									
DRY UNIT WEIGHT (kN/m^3)	14.0									
SPECIFIC GRAVITY	2.83									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	31									
PLASTICITY INDEX, PI	7									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	32									
TORVANE (kPa)	29	6								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1172

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-29-320	WB-29-320	WB-29-320	WB-29-320	WB-29-320	WB-29-320				
SAMPLE DEPTH (m)	2.13	3.66	4.57	6.10	9.14	12.19				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6002+849.932	6002+849.932	6002+849.932	6002+849.932	6002+849.932	6002+849.932				
OFFSET (RT or LT)	22.67 LT	22.67 LT	22.67 LT	22.67 LT	22.67 LT	22.67 LT				
ELEVATION (m)	1285.68	1285.68	1285.68	1285.68	1285.68	1285.68				
SAMPLE TYPE	SH	MC	SH	P	P	P				
DATE SAMPLED	02/15/2000	02/15/2000	02/15/2000	02/15/2000	02/15/2000	02/15/2000				
SOIL CLASSIFICATION (USCS)	CL	CL			CL	CL				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		92			99	100				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)					32	35				
WET UNIT WEIGHT (kN/m^3)					19.1	19.0				
DRY UNIT WEIGHT (kN/m^3)					14.5	14.0				
SPECIFIC GRAVITY	2.76					2.78				
ATTERBERG LIMITS										
LIQUID LIMIT, LL		39			37	41				
PLASTICITY INDEX, PI		15			19	18				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					81	115				
TORVANE (kPa)	13		12	29	53	48				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1173

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	WB-29-322	WB-29-322	WB-29-322	WB-29-322	WB-29-322	WB-29-322				
SAMPLE DEPTH (m)	1.52	2.13	4.57	6.10	7.62	10.67				
LINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE	D MAINLINE				
STATION	6003+168.988	6003+168.988	6003+168.988	6003+168.988	6003+168.988	6003+168.988				
OFFSET (RT or LT)	20.61 LT	20.61 LT	20.61 LT	20.61 LT	20.61 LT	20.61 LT				
ELEVATION (m)	1285.40	1285.40	1285.40	1285.40	1285.40	1285.40				
SAMPLE TYPE	SH	SPT	SH	MC	SH	SH				
DATE SAMPLED	02/16/2000	02/16/2000	02/16/2000	02/16/2000	02/16/2000	02/16/2000				
SOIL CLASSIFICATION (USCS)		CL	CL	ML		CL				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		94	84	85		94				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			36			24				
WET UNIT WEIGHT (kN/m^3)			18.1			21.0				
DRY UNIT WEIGHT (kN/m^3)			13.3			16.9				
SPECIFIC GRAVITY			2.83			2.75				
ATTERBERG LIMITS										
LIQUID LIMIT, LL		37	39	39		30				
PLASTICITY INDEX, PI		15	19	13		12				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)						93				
TORVANE (kPa)	34		29		55	36				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1174

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-357	RB-357	RB-357	RB-357	RB-357	RB-357	RB-357	RB-357		
SAMPLE DEPTH (m)	4.57	7.62	10.67	13.72	16.76	19.81	22.86	25.91		
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB		
STATION	58+000.295	58+000.295	58+000.295	58+000.295	58+000.295	58+000.295	58+000.295	58+000.295		
OFFSET (RT or LT)	0.61 LT	0.61 LT	0.61 LT	0.61 LT	0.61 LT	0.61 LT	0.61 LT	0.61 LT		
ELEVATION (m)	1286.40	1286.40	1286.40	1286.40	1286.40	1286.40	1286.40	1286.40		
SAMPLE TYPE	P	P	P	P	P	P	P	P		
DATE SAMPLED	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000		
SOIL CLASSIFICATION (USCS)			CL		CH		CL			
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)							98			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			26		36		43			
WET UNIT WEIGHT (kN/m^3)			19.5		18.6		16.3			
DRY UNIT WEIGHT (kN/m^3)			15.5		13.7		11.3			
SPECIFIC GRAVITY			2.79		2.72					
ATTERBERG LIMITS										
LIQUID LIMIT, LL			41							
PLASTICITY INDEX, PI			16							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			42				148			
TORVANE (kPa)	29	38	38	38	53	24	48	43		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1175

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-358	RB-358	RB-358	RB-358	RB-358					
SAMPLE DEPTH (m)	3.05	12.19	15.24	18.29	21.34					
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB					
STATION	58+149.095	58+149.095	58+149.095	58+149.095	58+149.095					
OFFSET (RT or LT)	3.41 RT	3.41 RT	3.41 RT	3.41 RT	3.41 RT					
ELEVATION (m)	1284.95	1284.95	1284.95	1284.95	1284.95					
SAMPLE TYPE	P	P	P	P	P					
DATE SAMPLED	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000					
SOIL CLASSIFICATION (USCS)	ML	CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	56		99							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	29	27	32							
WET UNIT WEIGHT (kN/m^3)	19.4	21.7	18.7							
DRY UNIT WEIGHT (kN/m^3)	15.1	17.1	14.2							
SPECIFIC GRAVITY	2.79		2.82							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	33		48							
PLASTICITY INDEX, PI	9		21							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			102							
TORVANE (kPa)	34	48	67	77	24					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1176

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-359	RB-359	RB-359	RB-359	RB-359	RB-359	RB-359	RB-359	RB-359	
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72	16.76	19.81	25.91	28.96	
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	
STATION	58+390.722	58+390.722	58+390.722	58+390.722	58+390.722	58+390.722	58+390.722	58+390.722	58+390.722	
OFFSET (RT or LT)	2.56 LT	2.56 LT	2.56 LT	2.56 LT	2.56 LT	2.56 LT	2.56 LT	2.56 LT	2.56 LT	
ELEVATION (m)	1284.96	1284.96	1284.96	1284.96	1284.96	1284.96	1284.96	1284.96	1284.96	
SAMPLE TYPE	P	P	P	P	P	P	P	P	P	
DATE SAMPLED	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000	
SOIL CLASSIFICATION (USCS)		CH		CH	CH	CH	CH			
GROUP CLASSIFICATION (AASHTO)				A-7-6	A-7-6	A-7-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)						99				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		54				42	50			
WET UNIT WEIGHT (kN/m^3)		17.0				17.5	17.1			
DRY UNIT WEIGHT (kN/m^3)		11.1				12.3	11.4			
SPECIFIC GRAVITY		2.74					2.73			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		55					57			
PLASTICITY INDEX, PI		29					29			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		41				105				
TORVANE (kPa)	19	24	34	34	53	67	43	48	34	
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1177

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-360	RB-360	RB-360	RB-360	RB-360	RB-360	RB-360	RB-360		
SAMPLE DEPTH (m)	1.52	4.57	9.14	10.67	12.19	13.72	16.76	22.86		
LINE	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB	I-215 to LP SB		
STATION	58+649.195	58+649.195	58+649.195	58+649.195	58+649.195	58+649.195	58+649.195	58+649.195		
OFFSET (RT or LT)	2.48 LT	2.48 LT	2.48 LT	2.48 LT	2.48 LT	2.48 LT	2.48 LT	2.48 LT		
ELEVATION (m)	1285.21	1285.21	1285.21	1285.21	1285.21	1285.21	1285.21	1285.21		
SAMPLE TYPE	P	P	MC	P	MC	P	P	P		
DATE SAMPLED	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000		
SOIL CLASSIFICATION (USCS)		CL		CL				CL		
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		99								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		42		28				39		
WET UNIT WEIGHT (kN/m^3)		18.0		19.3				18.1		
DRY UNIT WEIGHT (kN/m^3)		12.7		15.1				13.1		
SPECIFIC GRAVITY				2.77				2.74		
ATTERBERG LIMITS										
LIQUID LIMIT, LL		37								
PLASTICITY INDEX, PI		14								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		24								
TORVANE (kPa)	14	14	38	72	29	53	53	62		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1178

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-361	RB-361	RB-361	RB-361	RB-361	RB-361	RB-361			
SAMPLE DEPTH (m)	4.57	6.10	10.67	13.72	16.76	21.34	24.38			
LINE	I-215/LP SB	I-215/LP SB	I-215/LP SB	I-215/LP SB	I-215/LP SB	I-215/LP SB	I-215/LP SB			
STATION	58+794.720	58+794.720	58+794.720	58+794.720	58+794.720	58+794.720	58+794.720			
OFFSET (RT or LT)	7.25 LT	7.25 LT	7.25 LT	7.25 LT	7.25 LT	7.25 LT	7.25 LT			
ELEVATION (m)	372.86	372.86	372.86	372.86	372.86	372.86	372.86			
SAMPLE TYPE	P	MC	P	P	P	P	P			
DATE SAMPLED	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000			
SOIL CLASSIFICATION (USCS)			CL			CL				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			24			29				
WET UNIT WEIGHT (kN/m^3)			19.6			19.5				
DRY UNIT WEIGHT (kN/m^3)			15.8			15.1				
SPECIFIC GRAVITY			2.72			2.69				
ATTERBERG LIMITS										
LIQUID LIMIT, LL			43			36				
PLASTICITY INDEX, PI			22			15				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			83			117				
TORVANE (kPa)	43	43	53	48	62	57	38			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1179

Copyright Kleinfelder, Inc 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-362	RB-362	RB-362	RB-362	RB-362	RB-362				
SAMPLE DEPTH (m)	1.52	4.57	7.62	13.72	16.76	19.81				
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB				
STATION	56+279.804	56+279.804	56+279.804	56+279.804	56+279.804	56+279.804				
OFFSET (RT or LT)	6.27 RT	6.27 RT	6.27 RT	6.27 RT	6.27 RT	6.27 RT				
ELEVATION (m)	1284.98	1284.98	1284.98	1284.98	1284.98	1284.98				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000	2/21/2000				
SOIL CLASSIFICATION (USCS)			CL			CL				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			43			39				
WET UNIT WEIGHT (kN/m^3)			18.8			18.2				
DRY UNIT WEIGHT (kN/m^3)			13.1			13.1				
SPECIFIC GRAVITY			2.87			2.76				
ATTERBERG LIMITS										
LIQUID LIMIT, LL			34			45				
PLASTICITY INDEX, PI			12			21				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			32			139				
TORVANE (kPa)	29	14	19	43	34	57				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1180

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-363	RB-363	RB-363	RB-363	RB-363	RB-363				
SAMPLE DEPTH (m)	2.74	6.10	9.14	12.19	18.29	30.48				
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB				
STATION	56+518.546	56+518.546	56+518.546	56+518.546	56+518.546	56+518.546				
OFFSET (RT or LT)	7.08 RT	7.08 RT	7.08 RT	7.08 RT	7.08 RT	7.08 RT				
ELEVATION (m)	1285.02	1285.02	1285.02	1285.02	1285.02	1285.02				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000	2/18/2000				
SOIL CLASSIFICATION (USCS)		CL			CH					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		48			51					
WET UNIT WEIGHT (kN/m^3)		17.7			17.2					
DRY UNIT WEIGHT (kN/m^3)		11.9			11.4					
SPECIFIC GRAVITY		2.78			2.77					
ATTERBERG LIMITS										
LIQUID LIMIT, LL		40			64					
PLASTICITY INDEX, PI		17			38					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		23			105					
TORVANE (kPa)	24	19	29	48	34	34				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1181

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-364	RB-364	RB-364							
SAMPLE DEPTH (m)	1.52	4.57	18.29							
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB							
STATION	56+698.883	56+698.883	56+698.883							
OFFSET (RT or LT)	0.85 RT	0.85 RT	0.85 RT							
ELEVATION (m)	1284.71	1284.71	1284.71							
SAMPLE TYPE	P	P	P							
DATE SAMPLED	2/18/2000	2/18/2000	2/18/2000							
SOIL CLASSIFICATION (USCS)		CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		100	86							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		39	24							
WET UNIT WEIGHT (kN/m^3)		17.8	19.9							
DRY UNIT WEIGHT (kN/m^3)		12.8	16.1							
SPECIFIC GRAVITY		2.80	2.74							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		43								
PLASTICITY INDEX, PI		24								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		19								
TORVANE (kPa)	19	24	81							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1182

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-365	RB-365								
SAMPLE DEPTH (m)	1.52	7.62								
LINE	I-15 SB/LP SB	I-15 SB/LP SB								
STATION	60+408.284	60+408.284								
OFFSET (RT or LT)	1.91 RT	1.91 RT								
ELEVATION (m)	1295.07	1295.07								
SAMPLE TYPE	SH	SH								
DATE SAMPLED	3/1/2000	3/1/2000								
SOIL CLASSIFICATION (USCS)	ML	ML								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	94	88								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	32	28								
WET UNIT WEIGHT (kN/m^3)	18.7	19.8								
DRY UNIT WEIGHT (kN/m^3)	14.2	15.4								
SPECIFIC GRAVITY	2.83	2.78								
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	121	54								
TORVANE (kPa)	62	38								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1183

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-366	RB-366								
SAMPLE DEPTH (m)	1.52	2.13								
LINE	I-15 SB/LP SB	I-15 SB/LP SB								
STATION	60+267.794	60+267.794								
OFFSET (RT or LT)	3.08 LT	3.08 LT								
ELEVATION (m)	1294.72	1294.72								
SAMPLE TYPE	SH	SPT								
DATE SAMPLED	3/2/2000	3/2/2000								
SOIL CLASSIFICATION (USCS)	CH	SM								
GROUP CLASSIFICATION (AASHTO)		A-2-4								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100								
NO. 4 (4760 microns)		100								
NO. 100 (147 microns)		37								
NO. 200 (74 microns)		18								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	38									
WET UNIT WEIGHT (kN/m^3)	18.6									
DRY UNIT WEIGHT (kN/m^3)	13.4									
SPECIFIC GRAVITY	2.91									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	59									
PLASTICITY INDEX, PI	31									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	59									
TORVANE (kPa)	48									
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1184

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-367	RB-367								
SAMPLE DEPTH (m)	2.74	10.36								
LINE	I-15 SB/LP SB	I-15 SB/LP SB								
STATION	60+110.925	60+110.925								
OFFSET (RT or LT)	19.11 RT	19.11 RT								
ELEVATION (m)	1294.65	1294.65								
SAMPLE TYPE	P	P								
DATE SAMPLED	3/7/2000	3/7/2000								
SOIL CLASSIFICATION (USCS)		ML								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		88								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		29								
WET UNIT WEIGHT (kN/m^3)		19.6								
DRY UNIT WEIGHT (kN/m^3)		15.2								
SPECIFIC GRAVITY		2.78								
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		72								
TORVANE (kPa)	19	43								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1185

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-368	RB-368	RB-368	RB-368	RB-368	RB-368				
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72	16.76				
LINE	Center Street	Center Street	Center Street	Center Street	Center Street	Center Street				
STATION	5+309.965	5+309.965	5+309.965	5+309.965	5+309.965	5+309.965				
OFFSET (RT or LT)	0.06 LT	0.06 LT	0.06 LT	0.06 LT	0.06 LT	0.06 LT				
ELEVATION (m)	1285.24	1285.24	1285.24	1285.24	1285.24	1285.24				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	2/6/2000	2/6/2000	2/6/2000	2/6/2000	2/6/2000	2/6/2000				
SOIL CLASSIFICATION (USCS)		CL			CL	ML				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)						76				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		38			39	24				
WET UNIT WEIGHT (kN/m^3)		18.3			18.1	21.3				
DRY UNIT WEIGHT (kN/m^3)		13.3			13.0	17.2				
SPECIFIC GRAVITY		2.80				2.76				
ATTERBERG LIMITS										
LIQUID LIMIT, LL		43								
PLASTICITY INDEX, PI		18								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		28				73				
TORVANE (kPa)	14	29	38	24	43	29				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1186

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-369	RB-369	RB-369	RB-369	RB-369	RB-369				
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72	16.76				
LINE	Center Street	Center Street	Center Street	Center Street	Center Street	Center Street				
STATION	5+569.100	5+569.100	5+569.100	5+569.100	5+569.100	5+569.100				
OFFSET (RT or LT)	3.99 LT	3.99 LT	3.99 LT	3.99 LT	3.99 LT	3.99 LT				
ELEVATION (m)	1286.16	1286.16	1286.16	1286.16	1286.16	1286.16				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000	2/8/2000				
SOIL CLASSIFICATION (USCS)	CL				CL	CL				
GROUP CLASSIFICATION (AASHTO)					A-7-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	99				86	97				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	48				28	28				
WET UNIT WEIGHT (kN/m^3)	17.0				19.6	19.5				
DRY UNIT WEIGHT (kN/m^3)	11.5				15.3	15.3				
SPECIFIC GRAVITY	2.82					2.75				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	48				45					
PLASTICITY INDEX, PI	25				25					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					121					
TORVANE (kPa)	34	14	57	34	53	57				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1187

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-370	RB-370	RB-370	RB-370						
SAMPLE DEPTH (m)	6.10	10.67	18.29	21.34						
LINE	Glovers Lane	Glovers Lane	Glovers Lane	Glovers Lane						
STATION	50+571.674	50+571.674	50+571.674	50+571.674						
OFFSET (RT or LT)	7.54 RT	7.54 RT	7.54 RT	7.54 RT						
ELEVATION (m)	1295.03	1295.03	1295.03	1295.03						
SAMPLE TYPE	SH	MC	SH	SH						
DATE SAMPLED	3/14/2000	3/14/2000	3/14/2000	3/14/2000						
SOIL CLASSIFICATION (USCS)		SP-SM	ML							
GROUP CLASSIFICATION (AASHTO)		A-2-4								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100								
NO. 4 (4760 microns)		100								
NO. 100 (147 microns)		46								
NO. 200 (74 microns)		11								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			43							
WET UNIT WEIGHT (kN/m^3)			18.2							
DRY UNIT WEIGHT (kN/m^3)			12.7							
SPECIFIC GRAVITY			2.77							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			44							
PLASTICITY INDEX, PI			16							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			127							
TORVANE (kPa)	43		53	57						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1188

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-371	RB-371	RB-371	RB-371	RB-371	RB-371	RB-371	RB-371	RB-371	RB-371
SAMPLE DEPTH (m)	0.61	3.05	6.10	9.14	12.19	15.24	16.76	17.37	19.81	25.91
LINE	500 South	500 South	500 South	500 South	500 South	500 South	500 South	500 South	500 South	500 South
STATION	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171	70+338.171
OFFSET (RT or LT)	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT	0.29 RT
ELEVATION (m)	1286.83	1286.83	1286.83	1286.83	1286.83	1286.83	1286.83	1286.83	1286.83	1286.83
SAMPLE TYPE	SPT	P	P	P	P	P	P	P	P	P
DATE SAMPLED	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000	2/28/2000
SOIL CLASSIFICATION (USCS)		CL							CL	
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		97							86	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		34							17	
WET UNIT WEIGHT (kN/m^3)		19.2							21.7	
DRY UNIT WEIGHT (kN/m^3)		14.3							18.5	
SPECIFIC GRAVITY		2.68							2.81	
ATTERBERG LIMITS										
LIQUID LIMIT, LL		42							29	
PLASTICITY INDEX, PI		22							13	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		43							63	
TORVANE (kPa)	29	38	62	86	38	48	96	96	86	86
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1189

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-372	RB-372	RB-372							
SAMPLE DEPTH (m)	3.05	7.62	10.67							
LINE	89 SB/LP SB	89 SB/LP SB	89 SB/LP SB							
STATION	70+447.152	70+447.152	70+447.152							
OFFSET (RT or LT)	11.43 RT	11.43 RT	11.43 RT							
ELEVATION (m)	1295.02	1295.02	1295.02							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	3/23/2000	3/23/2000	3/23/2000							
SOIL CLASSIFICATION (USCS)		ML	ML							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		93								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		30	28							
WET UNIT WEIGHT (kN/m^3)		20.4	19.4							
DRY UNIT WEIGHT (kN/m^3)		15.7	15.2							
SPECIFIC GRAVITY		2.76	2.74							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		33								
PLASTICITY INDEX, PI		7								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		55								
TORVANE (kPa)	53	43	38							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1190

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-373	RB-373	RB-373	RB-373	RB-373					
SAMPLE DEPTH (m)	2.13	4.57	7.62	10.67	12.80					
LINE	89 SB/LP SB	89 SB/LP SB	89 SB/LP SB	89 SB/LP SB	89 SB/LP SB					
STATION	70+604.650	70+604.650	70+604.650	70+604.650	70+604.650					
OFFSET (RT or LT)	4.71 RT	4.71 RT	4.71 RT	4.71 RT	4.71 RT					
ELEVATION (m)	1295.51	1295.51	1295.51	1295.51	1295.51					
SAMPLE TYPE	SPT	MC	MC	P	SPT					
DATE SAMPLED	3/2/2000	3/2/2000	3/2/2000	3/2/2000	3/2/2000					
SOIL CLASSIFICATION (USCS)	SM	GW-GM	SM	CL	GW-GM					
GROUP CLASSIFICATION (AASHTO)	A-2-4									
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100			100					
NO. 4 (4760 microns)		42			39					
NO. 100 (147 microns)		10			8					
NO. 200 (74 microns)	40	7	38	91	6					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				25						
WET UNIT WEIGHT (kN/m^3)				20.6						
DRY UNIT WEIGHT (kN/m^3)				16.6						
SPECIFIC GRAVITY				2.72						
ATTERBERG LIMITS										
LIQUID LIMIT, LL				32						
PLASTICITY INDEX, PI				12						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				71						
TORVANE (kPa)				51						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1191

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-374	RB-374	RB-374							
SAMPLE DEPTH (m)	3.05	6.10	9.14							
LINE	89 SB/LP SB	89 SB/LP SB	89 SB/LP SB							
STATION	71+086.495	71+086.495	71+086.495							
OFFSET (RT or LT)	1.40 RT	1.40 RT	1.40 RT							
ELEVATION (m)	1298.44	1298.44	1298.44							
SAMPLE TYPE	P	P	P							
DATE SAMPLED	3/6/2000	3/6/2000	3/6/2000							
SOIL CLASSIFICATION (USCS)		CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		90	94							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		27	25							
WET UNIT WEIGHT (kN/m^3)		19.9	17.7							
DRY UNIT WEIGHT (kN/m^3)		15.7	14.2							
SPECIFIC GRAVITY		2.79	2.72							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		36	35							
PLASTICITY INDEX, PI		17	14							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		71	77							
TORVANE (kPa)	34	34	57							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1192

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-375									
SAMPLE DEPTH (m)	9.14									
LINE	89 SB/LP SB									
STATION	71+238.091									
OFFSET (RT or LT)	0.81 RT									
ELEVATION (m)	1299.09									
SAMPLE TYPE	P									
DATE SAMPLED	3/8/2000									
SOIL CLASSIFICATION (USCS)	ML									
GROUP CLASSIFICATION (AASHTO)	A-4									
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	97									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27									
WET UNIT WEIGHT (kN/m^3)	20.1									
DRY UNIT WEIGHT (kN/m^3)	15.7									
SPECIFIC GRAVITY	2.86									
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	99									
TORVANE (kPa)	48									
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1193

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-376	RB-376	RB-376	RB-376	RB-376	RB-376	RB-376	RB-376		
SAMPLE DEPTH (m)	3.05	6.10	12.19	15.24	16.76	22.86	25.91	28.96		
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline		
STATION	6002+008.023	6002+008.023	6002+008.023	6002+008.023	6002+008.023	6002+008.023	6002+008.023	6002+008.023		
OFFSET (RT or LT)	0.84 LT	0.84 LT	0.84 LT	0.84 LT	0.84 LT	0.84 LT	0.84 LT	0.84 LT		
ELEVATION (m)	1285.63	1285.63	1285.63	1285.63	1285.63	1285.63	1285.63	1285.63		
SAMPLE TYPE	P	P	P	P	P	P	P	P		
DATE SAMPLED	2/20/2000	2/20/2000	2/20/2000	2/20/2000	2/20/2000	2/20/2000	2/20/2000	2/20/2000		
SOIL CLASSIFICATION (USCS)		CL	CL	CH						
GROUP CLASSIFICATION (AASHTO)				A-7-6						
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		94								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		27	31							
WET UNIT WEIGHT (kN/m^3)		19.9	18.5							
DRY UNIT WEIGHT (kN/m^3)		15.7	13.4							
SPECIFIC GRAVITY		2.69	2.79							
ATTERBERG LIMITS										
LIQUID LIMIT, LL		36	35							
PLASTICITY INDEX, PI		13	13							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		130								
TORVANE (kPa)	48	48	24	48	67	38	48	53		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1194

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-377	RB-377	RB-377	RB-377	RB-377					
SAMPLE DEPTH (m)	6.10	9.14	12.19	16.76	22.86					
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline					
STATION	6002+159.558	6002+159.558	6002+159.558	6002+159.558	6002+159.558					
OFFSET (RT or LT)	5.75 RT	5.75 RT	5.75 RT	5.75 RT	5.75 RT					
ELEVATION (m)	1286.64	1286.64	1286.64	1286.64	1286.64					
SAMPLE TYPE	P	P	P	P	P					
DATE SAMPLED	2/23/2000	2/23/2000	2/23/2000	2/23/2000	2/23/2000					
SOIL CLASSIFICATION (USCS)	CH		CL	CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	99		99	99						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	51		34	31						
WET UNIT WEIGHT (kN/m^3)	17.0		19.1	18.4						
DRY UNIT WEIGHT (kN/m^3)	11.3		14.2	14.1						
SPECIFIC GRAVITY	2.79		2.71							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	50		40							
PLASTICITY INDEX, PI	25		16							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	53			102						
TORVANE (kPa)	53	19	38	53	38					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1195

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-378	RB-378	RB-378							
SAMPLE DEPTH (m)	6.10	15.24	21.34							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6002+389.999	6002+389.999	6002+389.999							
OFFSET (RT or LT)	0.02 RT	0.02 RT	0.02 RT							
ELEVATION (m)	1285.29	1285.29	1285.29							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	2/22/2000	2/22/2000	2/22/2000							
SOIL CLASSIFICATION (USCS)	CH	CL								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		89								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	50	33								
WET UNIT WEIGHT (kN/m^3)	17.2	18.6								
DRY UNIT WEIGHT (kN/m^3)	11.5	13.8								
SPECIFIC GRAVITY	2.81	2.75								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	62	42								
PLASTICITY INDEX, PI	32	22								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	39									
TORVANE (kPa)	24	43	43							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1196

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-379	RB-379	RB-379	RB-379	RB-379	RB-379	RB-379			
SAMPLE DEPTH (m)	1.52	4.57	6.71	7.62	10.67	15.24	18.29			
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline			
STATION	6012+954.442	6012+954.442	6012+954.442	6012+954.442	6012+954.442	6012+954.442	6012+954.442			
OFFSET (RT or LT)	2.22 RT	2.22 RT	2.22 RT	2.22 RT	2.22 RT	2.22 RT	2.22 RT			
ELEVATION (m)	1284.99	1284.99	1284.99	1284.99	1284.99	1284.99	1284.99			
SAMPLE TYPE	SH	SH	SPT	SH	SH	SPT	SH			
DATE SAMPLED	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000	4/21/2000			
SOIL CLASSIFICATION (USCS)		CL	CL		CL	SC				
GROUP CLASSIFICATION (AASHTO)					A-7-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			80			39				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		26			35					
WET UNIT WEIGHT (kN/m^3)		19.6			19.5					
DRY UNIT WEIGHT (kN/m^3)		15.6			14.5					
SPECIFIC GRAVITY		2.79			2.80					
ATTERBERG LIMITS										
LIQUID LIMIT, LL		41	50		48					
PLASTICITY INDEX, PI		20	22		25					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		92			109					
TORVANE (kPa)	144	62		77	77		57			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1197

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-380	RB-380	RB-380	RB-380	RB-380					
SAMPLE DEPTH (m)	3.05	6.10	9.14	12.19	27.43					
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline					
STATION	6013+100.373	6013+100.373	6013+100.373	6013+100.373	6013+100.373					
OFFSET (RT or LT)	4.61 RT	4.61 RT	4.61 RT	4.61 RT	4.61 RT					
ELEVATION (m)	1285.03	1285.03	1285.03	1285.03	1285.03					
SAMPLE TYPE	P	P	P	P	P					
DATE SAMPLED	3/1/2000	3/1/2000	3/1/2000	3/1/2000	3/1/2000					
SOIL CLASSIFICATION (USCS)	CL		CH		CL					
GROUP CLASSIFICATION (AASHTO)	A-6		A-7-6							
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	97									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27		50		28					
WET UNIT WEIGHT (kN/m^3)	19.0		17.1		19.4					
DRY UNIT WEIGHT (kN/m^3)	14.9		11.4		15.2					
SPECIFIC GRAVITY	2.76				2.75					
ATTERBERG LIMITS										
LIQUID LIMIT, LL	39		73							
PLASTICITY INDEX, PI	19		43							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	105		47							
TORVANE (kPa)	57	53	48	14	81					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1198

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-381	RB-381	RB-381	RB-381	RB-381	RB-381				
SAMPLE DEPTH (m)	3.05	6.10	12.19	15.24	24.38	30.48				
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline				
STATION	6013+583.830	6013+583.830	6013+583.830	6013+583.830	6013+583.830	6013+583.830				
OFFSET (RT or LT)	0.67 RT	0.67 RT	0.67 RT	0.67 RT	0.67 RT	0.67 RT				
ELEVATION (m)	1285.06	1285.06	1285.06	1285.06	1285.06	1285.06				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000	3/3/2000				
SOIL CLASSIFICATION (USCS)	CH	CH		ML	CL					
GROUP CLASSIFICATION (AASHTO)	A-7-6									
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)				61						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		42		22	33					
WET UNIT WEIGHT (kN/m^3)		19.1		23.9	19.1					
DRY UNIT WEIGHT (kN/m^3)		13.5		19.6	14.4					
SPECIFIC GRAVITY		2.75			2.72					
ATTERBERG LIMITS										
LIQUID LIMIT, LL		52			34					
PLASTICITY INDEX, PI		28			14					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		7		79						
TORVANE (kPa)	24	14	43	29	43	57				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1199

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-382	RB-382	RB-382	RB-382	RB-382	RB-382	RB-382	RB-382	RB-382	
SAMPLE DEPTH (m)	1.52	6.71	10.67	13.72	16.76	19.81	21.34	22.86	27.43	
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	
STATION	6014+004.123	6014+004.123	6014+004.123	6014+004.123	6014+004.123	6014+004.123	6014+004.123	6014+004.123	6014+004.123	
OFFSET (RT or LT)	7.46 RT	7.46 RT	7.46 RT	7.46 RT	7.46 RT	7.46 RT	7.46 RT	7.46 RT	7.46 RT	
ELEVATION (m)	1285.82	1285.82	1285.82	1285.82	1285.82	1285.82	1285.82	1285.82	1285.82	
SAMPLE TYPE	P	SPT	P	P	P	P	SPT	P	SPT	
DATE SAMPLED	2/5/2000	2/5/2000	2/5/2000	2/5/2000	2/5/2000	2/5/2000	2/5/2000	2/5/2000	2/5/2000	
SOIL CLASSIFICATION (USCS)	CL	CL	CL	CH			SM			
GROUP CLASSIFICATION (AASHTO)	A-6			A-7-6						
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING							100			
NO. 4 (4760 microns)							99			
NO. 100 (147 microns)							32			
NO. 200 (74 microns)	97	83	97				16			
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	29		41							
WET UNIT WEIGHT (kN/m^3)	19.5		18.3							
DRY UNIT WEIGHT (kN/m^3)	15.1		13.0							
SPECIFIC GRAVITY	2.77		2.75							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	39	33	37	52						
PLASTICITY INDEX, PI	19	15	19	30						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	79		55							
TORVANE (kPa)	38		34	46	48	50		62	67	
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1200

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-383	RB-383	RB-383	RB-383	RB-383	RB-383				
SAMPLE DEPTH (m)	3.05	6.10	9.14	16.76	25.91	28.96				
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline				
STATION	6014+195.674	6014+195.674	6014+195.674	6014+195.674	6014+195.674	6014+195.674				
OFFSET (RT or LT)	1.25 RT	1.25 RT	1.25 RT	1.25 RT	1.25 RT	1.25 RT				
ELEVATION (m)	1284.43	1284.43	1284.43	1284.43	1284.43	1284.43				
SAMPLE TYPE	P	P	P	P	P	P				
DATE SAMPLED	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000				
SOIL CLASSIFICATION (USCS)		CH		CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)				98						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		47		49						
WET UNIT WEIGHT (kN/m^3)		16.8		17.2						
DRY UNIT WEIGHT (kN/m^3)		11.5		11.5						
SPECIFIC GRAVITY		2.79		2.77						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		51								
PLASTICITY INDEX, PI		29								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		46								
TORVANE (kPa)	81	34	38	29	86	86				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1201

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-384	RB-384	RB-384	RB-384	RB-384					
SAMPLE DEPTH (m)	3.05	7.62	9.75	13.72	15.24					
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline					
STATION	6014+384.292	6014+384.292	6014+384.292	6014+384.292	6014+384.292					
OFFSET (RT or LT)	0.97 RT	0.97 RT	0.97 RT	0.97 RT	0.97 RT					
ELEVATION (m)	1284.60	1284.60	1284.60	1284.60	1284.60					
SAMPLE TYPE	P	P	SPT	P	P					
DATE SAMPLED	2/13/2000	2/13/2000	2/13/2000	2/13/2000	2/13/2000					
SOIL CLASSIFICATION (USCS)		CH			CL					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		91			98					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		48			40					
WET UNIT WEIGHT (kN/m^3)		17.7			17.8					
DRY UNIT WEIGHT (kN/m^3)		12.4			12.7					
SPECIFIC GRAVITY		2.75			2.71					
ATTERBERG LIMITS										
LIQUID LIMIT, LL		58			46					
PLASTICITY INDEX, PI		31			20					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					85					
TORVANE (kPa)	72	34	48	34	34					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1202

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-385	RB-385	RB-385	RB-385	RB-385	RB-385				
SAMPLE DEPTH (m)	2.74	5.03	8.08		10.67	21.34				
LINE	LP N/I15 N 89	LP N/I15 N 89	LP N/I15 N 89	LP N/I15 N 89	LP N/I15 N 89	LP N/I15 N 89				
STATION	20+438.886	20+438.886	20+438.886	20+438.886	20+438.886	20+438.886				
OFFSET (RT or LT)	16.47 RT	16.47 RT	16.47 RT	16.47 RT	16.47 RT	16.47 RT				
ELEVATION (m)	1297.06	1297.06	1297.06	1297.06	1297.06	1297.06				
SAMPLE TYPE	P	SPT	SPT		P	P				
DATE SAMPLED	3/1/2000	3/1/2000	3/1/2000	3/1/2000	3/1/2000	3/1/2000				
SOIL CLASSIFICATION (USCS)	CL	SP-SM		SP-SM	CL	CH				
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING		100		100						
NO. 4 (4760 microns)		64		91						
NO. 100 (147 microns)		15		18						
NO. 200 (74 microns)	94	11	63	9	88					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	31				24	39				
WET UNIT WEIGHT (kN/m^3)	19.0				20.2	18.5				
DRY UNIT WEIGHT (kN/m^3)	14.5				16.2	13.4				
SPECIFIC GRAVITY					2.63	2.68				
ATTERBERG LIMITS										
LIQUID LIMIT, LL						59				
PLASTICITY INDEX, PI						32				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	76					186				
TORVANE (kPa)	72				62	72				
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1203

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-386	RB-386	RB-386	RB-386	RB-386					
SAMPLE DEPTH (m)	1.52	4.57	7.62	10.67	13.72					
LINE	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB	LP SB/I-15 SB					
STATION	57+559.728	57+559.728	57+559.728	57+559.728	57+559.728					
OFFSET (RT or LT)	1.00 RT	1.00 RT	1.00 RT	1.00 RT	1.00 RT					
ELEVATION (m)	1285.35	1285.35	1285.35	1285.35	1285.35					
SAMPLE TYPE	SH	SH	SH	SH	SH					
DATE SAMPLED	2/15/2000	2/15/2000	2/15/2000	2/15/2000	2/15/2000					
SOIL CLASSIFICATION (USCS)		ML	ML	CL	CL					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		20		22	39					
WET UNIT WEIGHT (kN/m^3)		21.3		20.8	18.3					
DRY UNIT WEIGHT (kN/m^3)		17.7		17.1	13.1					
SPECIFIC GRAVITY		2.76		2.79						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		NP		31						
PLASTICITY INDEX, PI		NP		13						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				113						
TORVANE (kPa)	29	29	29	29	34					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1204

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-388	RB-388	RB-388	RB-388	RB-388					
SAMPLE DEPTH (m)	4.27	6.71	9.14	13.41	22.86					
LINE	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB					
STATION	50+829.497	50+829.497	50+829.497	50+829.497	50+829.497					
OFFSET (RT or LT)	0.07 RT	0.07 RT	0.07 RT	0.07 RT	0.07 RT					
ELEVATION (m)	1285.24	1285.24	1285.24	1285.24	1285.24					
SAMPLE TYPE	P	P	P	P	P					
DATE SAMPLED	2/16/2000	2/16/2000	2/16/2000	2/16/2000	2/16/2000					
SOIL CLASSIFICATION (USCS)			CL		CL					
GROUP CLASSIFICATION (AASHTO)			A-6							
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)					99					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			45		26					
WET UNIT WEIGHT (kN/m^3)			17.5		20.1					
DRY UNIT WEIGHT (kN/m^3)			12.0		16.0					
SPECIFIC GRAVITY			2.74		2.74					
ATTERBERG LIMITS										
LIQUID LIMIT, LL			36		27					
PLASTICITY INDEX, PI			13		8					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			64		131					
TORVANE (kPa)	19	10	29	10	57					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1205

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-389	RB-389	RB-389	RB-389	RB-389	RB-389				
SAMPLE DEPTH (m)	1.52	4.57	7.62	9.14	12.19	22.86				
LINE	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB	I-15 NB/LP NB				
STATION	51+019.953	51+019.953	51+019.953	51+019.953	51+019.953	51+019.953				
OFFSET (RT or LT)	0.01 RT	0.01 RT	0.01 RT	0.01 RT	0.01 RT	0.01 RT				
ELEVATION (m)	1286.01	1286.01	1286.01	1286.01	1286.01	1286.01				
SAMPLE TYPE	SH	SH	SH	MC	MC	MC				
DATE SAMPLED	2/16/2000	2/16/2000	2/16/2000	2/16/2000	2/16/2000	2/16/2000				
SOIL CLASSIFICATION (USCS)	CL	CL	CL	CL		ML				
GROUP CLASSIFICATION (AASHTO)						A-2-6				
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	94	97		56	76	58				
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27	45	29							
WET UNIT WEIGHT (kN/m^3)	19.3	17.8	19.9							
DRY UNIT WEIGHT (kN/m^3)	15.3	12.3	15.4							
SPECIFIC GRAVITY	2.70	2.75								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	45	45		37		NP				
PLASTICITY INDEX, PI	21	20		14		NP				
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		27	56							
TORVANE (kPa)	53	24	19							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1206

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-390	RB-390	RB-390	RB-390						
SAMPLE DEPTH (m)	2.74	5.79	8.84	11.89						
LINE	Burke Lane	Burke Lane	Burke Lane	Burke Lane						
STATION	4+804.884	4+804.884	4+804.884	4+804.884						
OFFSET (RT or LT)	0.88 LT	0.88 LT	0.88 LT	0.88 LT						
ELEVATION (m)	1296.71	1296.71	1296.71	1296.71						
SAMPLE TYPE	P	P	P	P						
DATE SAMPLED	3/4/2000	3/4/2000	3/4/2000	3/4/2000						
SOIL CLASSIFICATION (USCS)		ML	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		90	97							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		27	29							
WET UNIT WEIGHT (kN/m^3)		20.6	20.0							
DRY UNIT WEIGHT (kN/m^3)		16.3	15.5							
SPECIFIC GRAVITY		2.74	2.74							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			31							
PLASTICITY INDEX, PI			9							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		73	123							
TORVANE (kPa)	14	38	38	38						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1207

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-391									
SAMPLE DEPTH (m)	8.23									
LINE	Burke Lane									
STATION	5+171.955									
OFFSET (RT or LT)	0.76 LT									
ELEVATION (m)	1302.53									
SAMPLE TYPE	SPT									
DATE SAMPLED	3/4/2000									
SOIL CLASSIFICATION (USCS)	SM									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	31									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27									
WET UNIT WEIGHT (kN/m^3)										
DRY UNIT WEIGHT (kN/m^3)										
SPECIFIC GRAVITY										
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)										
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1208

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-392	RB-392	RB-392	RB-392	RB-392	RB-392	RB-392			
SAMPLE DEPTH (m)	3.05	6.10	12.19	15.24	19.81	22.86	25.91			
LINE	LP NB/I15	LP NB/I15	LP NB/I15	LP NB/I15	LP NB/I15	LP NB/I15	LP NB/I15			
STATION	54+787.955	54+787.955	54+787.955	54+787.955	54+787.955	54+787.955	54+787.955			
OFFSET (RT or LT)	1.05 LT	1.05 LT	1.05 LT	1.05 LT	1.05 LT	1.05 LT	1.05 LT			
ELEVATION (m)	1286.01	1286.01	1286.01	1286.01	1286.01	1286.01	1286.01			
SAMPLE TYPE	P	P	P	P	P	P	P			
DATE SAMPLED	2/29/2000	2/29/2000	2/29/2000	2/29/2000	2/29/2000	2/29/2000	2/29/2000			
SOIL CLASSIFICATION (USCS)		CL	CL	CL	ML		CL			
GROUP CLASSIFICATION (AASHTO)			A-7-6	A-7-6	A-4		A-7-6			
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)										
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		51					7			
WET UNIT WEIGHT (kN/m^3)		17.0					19.6			
DRY UNIT WEIGHT (kN/m^3)		11.3					18.3			
SPECIFIC GRAVITY		2.70					2.79			
ATTERBERG LIMITS										
LIQUID LIMIT, LL		41					45			
PLASTICITY INDEX, PI		17					22			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		27					157			
TORVANE (kPa)	29	24	48	34	48	48	48			
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1209

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-393	RB-393	RB-393	RB-393	RB-393					
SAMPLE DEPTH (m)	3.05	6.71	9.75	12.19	15.24					
LINE	LP NB/I15 (I-215)	P NB/I15 (I-215)	P NB/I15 (I-215)	P NB/I15 (I-215)	P NB/I15 (I-215)					
STATION	54+938.150	54+938.150	54+938.150	54+938.150	54+938.150					
OFFSET (RT or LT)	4.05 LT	4.05 LT	4.05 LT	4.05 LT	4.05 LT					
ELEVATION (m)	1285.69	1285.69	1285.69	1285.69	1285.69					
SAMPLE TYPE	P	SPT	P	P	P					
DATE SAMPLED	2/22/2000	2/22/2000	2/22/2000	2/22/2000	2/22/2000					
SOIL CLASSIFICATION (USCS)	CL				CL					
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			34		99					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	55				44					
WET UNIT WEIGHT (kN/m^3)	17.4				17.6					
DRY UNIT WEIGHT (kN/m^3)	11.9				12.2					
SPECIFIC GRAVITY	2.71				2.76					
ATTERBERG LIMITS										
LIQUID LIMIT, LL	41				44					
PLASTICITY INDEX, PI	20				21					
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	28									
TORVANE (kPa)	34	29		67	77					
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA
Legacy Parkway - Preferred Alternative
I-215 to I-15/US 89 Interchange

PLATE
K-1210

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-394	RB-394	RB-394	RB-394						
SAMPLE DEPTH (m)	0.00	2.13	4.57	7.62						
LINE	I-15 WD NB	I-15 WD NB	I-15 WD NB	I-15 WD NB						
STATION	51+250.000	51+250.000	51+250.000	51+250.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1286.61	1286.61	1286.61	1286.61						
SAMPLE TYPE	MC	SH	SH	SH						
DATE SAMPLED	5/10/2000	5/10/2000	5/10/2000	5/10/2000						
SOIL CLASSIFICATION (USCS)	GP-GM	CL		CL						
GROUP CLASSIFICATION (AASHTO)		A-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING	100									
NO. 4 (4760 microns)	36									
NO. 100 (147 microns)	14									
NO. 200 (74 microns)	10									
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		30		30						
WET UNIT WEIGHT (kN/m^3)		20.4		19.1						
DRY UNIT WEIGHT (kN/m^3)		15.7		14.6						
SPECIFIC GRAVITY				2.77						
ATTERBERG LIMITS										
LIQUID LIMIT, LL		29		30						
PLASTICITY INDEX, PI		10		11						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		84								
TORVANE (kPa)		32	38	38						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1211

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-395	RB-395	RB-395	RB-395						
SAMPLE DEPTH (m)	1.52	3.66	4.57	7.62						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6003+950.000	6003+950.000	6003+950.000	6003+950.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1286.26	1286.26	1286.26	1286.26						
SAMPLE TYPE	SH	SPT	SH	SH						
DATE SAMPLED	5/10/2000	5/10/2000	5/10/2000	5/10/2000						
SOIL CLASSIFICATION (USCS)	CL		CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		55								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	41		22							
WET UNIT WEIGHT (kN/m^3)	18.1		20.3							
DRY UNIT WEIGHT (kN/m^3)	12.8		16.7							
SPECIFIC GRAVITY	2.75		2.71							
ATTERBERG LIMITS										
LIQUID LIMIT, LL	40		40							
PLASTICITY INDEX, PI	19		17							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			33							
TORVANE (kPa)	34		24	48						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1212

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-396	RB-396								
SAMPLE DEPTH (m)	3.05	6.10								
LINE	D Mainline	D Mainline								
STATION	6004+534.815	6004+534.815								
OFFSET (RT or LT)	93.86 RT	93.86 RT								
ELEVATION (m)	1286.99	1286.99								
SAMPLE TYPE	SH	SH								
DATE SAMPLED	5/11/2000	5/11/2000								
SOIL CLASSIFICATION (USCS)	CL	ML								
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	92	50								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	42									
WET UNIT WEIGHT (kN/m^3)	19.7									
DRY UNIT WEIGHT (kN/m^3)	13.9									
SPECIFIC GRAVITY	2.74									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	39									
PLASTICITY INDEX, PI	19									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)										
TORVANE (kPa)	38	29								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1213

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-397	RB-397	RB-397							
SAMPLE DEPTH (m)	1.52	4.57	7.62							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6005+180.000	6005+180.000	6005+180.000							
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT							
ELEVATION (m)	1286.90	1286.90	1286.90							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	5/17/2000	5/17/2000	5/17/2000							
SOIL CLASSIFICATION (USCS)			ML							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			60							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			23							
WET UNIT WEIGHT (kN/m^3)			20.6							
DRY UNIT WEIGHT (kN/m^3)			16.7							
SPECIFIC GRAVITY			2.69							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			NP							
PLASTICITY INDEX, PI			NP							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			24							
TORVANE (kPa)	53	43	53							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1214

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-398	RB-398	RB-398	RB-398						
SAMPLE DEPTH (m)	1.52	4.57	6.71	8.23						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6005+650.000	6005+650.000	6005+650.000	6005+650.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1286.53	1286.53	1286.53	1286.53						
SAMPLE TYPE	SH	SH	SPT	MC						
DATE SAMPLED	5/10/2000	5/10/2000	5/10/2000	5/10/2000						
SOIL CLASSIFICATION (USCS)	CL	CL		SM						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING				100						
NO. 4 (4760 microns)				100						
NO. 100 (147 microns)				43						
NO. 200 (74 microns)			99	13						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	35	28								
WET UNIT WEIGHT (kN/m^3)	18.0	18.9								
DRY UNIT WEIGHT (kN/m^3)	13.4	14.8								
SPECIFIC GRAVITY		2.78								
ATTERBERG LIMITS										
LIQUID LIMIT, LL		44								
PLASTICITY INDEX, PI		26								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		47								
TORVANE (kPa)	38	48								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1215

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-399	RB-399	RB-399	RB-399	RB-399					
SAMPLE DEPTH (m)	1.52	3.05	4.57	7.62	8.23					
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline					
STATION	6005+940.000	6005+940.000	6005+940.000	6005+940.000	6005+940.000					
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT					
ELEVATION (m)	1286.47	1286.47	1286.47	1286.47	1286.47					
SAMPLE TYPE	SH	MC	SH	SH	SPT					
DATE SAMPLED	5/15/2000	5/15/2000	5/15/2000	5/15/2000	5/15/2000					
SOIL CLASSIFICATION (USCS)		ML	CL		SM					
GROUP CLASSIFICATION (AASHTO)			A-7-6		A-2-4					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	95	96	100	63	39					
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		31	38							
WET UNIT WEIGHT (kN/m^3)		18.8	19.5							
DRY UNIT WEIGHT (kN/m^3)		14.4	14.2							
SPECIFIC GRAVITY			2.77							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			46							
PLASTICITY INDEX, PI			26							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			32							
TORVANE (kPa)	57		67							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1216

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-400	RB-400	RB-400	RB-400						
SAMPLE DEPTH (m)	1.52	4.57	6.71	7.62						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6006+800.000	6006+800.000	6006+800.000	6006+800.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1287.24	1287.24	1287.24	1287.24						
SAMPLE TYPE	SH	SH	SPT	SH						
DATE SAMPLED	5/15/2000	5/15/2000	5/15/2000	5/15/2000						
SOIL CLASSIFICATION (USCS)	CL	CL								
GROUP CLASSIFICATION (AASHTO)		A-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)			10							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	38	27								
WET UNIT WEIGHT (kN/m^3)	18.2	19.8								
DRY UNIT WEIGHT (kN/m^3)	13.1	15.6								
SPECIFIC GRAVITY	2.77									
ATTERBERG LIMITS										
LIQUID LIMIT, LL		35								
PLASTICITY INDEX, PI		16								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		64								
TORVANE (kPa)	38	67		57						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1217

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-401	RB-401	RB-401							
SAMPLE DEPTH (m)	1.52	4.57	7.62							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6007+400.000	6007+400.000	6007+400.000							
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT							
ELEVATION (m)	1287.07	1287.07	1287.07							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	5/18/2000	5/18/2000	5/18/2000							
SOIL CLASSIFICATION (USCS)	ML	ML								
GROUP CLASSIFICATION (AASHTO)	A-3									
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	94	79								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	27	27								
WET UNIT WEIGHT (kN/m^3)	19.1	18.1								
DRY UNIT WEIGHT (kN/m^3)	15.0	14.3								
SPECIFIC GRAVITY		2.71								
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		74								
TORVANE (kPa)	67	38	77							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1218

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-402	RB-402	RB-402							
SAMPLE DEPTH (m)	1.52	4.57	7.62							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6007+800.000	6007+800.000	6007+800.000							
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT							
ELEVATION (m)	1287.01	1287.01	1287.01							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	5/15/2000	5/15/2000	5/15/2000							
SOIL CLASSIFICATION (USCS)	CL	CL								
GROUP CLASSIFICATION (AASHTO)		A-6								
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	98	99								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)		40								
WET UNIT WEIGHT (kN/m^3)		17.6								
DRY UNIT WEIGHT (kN/m^3)		12.6								
SPECIFIC GRAVITY		2.75								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	47									
PLASTICITY INDEX, PI	23									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)		25								
TORVANE (kPa)	81	45	67							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1219

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-403	RB-403	RB-403							
SAMPLE DEPTH (m)	1.52	4.57	7.62							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6008+885.000	6008+885.000	6008+885.000							
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT							
ELEVATION (m)	1285.34	1285.34	1285.34							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	5/15/2000	5/15/2000	5/15/2000							
SOIL CLASSIFICATION (USCS)	CL		CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	99	96	91							
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	22		32							
WET UNIT WEIGHT (kN/m^3)	20.5		18.1							
DRY UNIT WEIGHT (kN/m^3)	16.7		13.7							
SPECIFIC GRAVITY	2.83									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	42									
PLASTICITY INDEX, PI	21									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	293									
TORVANE (kPa)	81	72	67							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1220

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-404	RB-404	RB-404							
SAMPLE DEPTH (m)	1.52	4.57	7.62							
LINE	D Mainline	D Mainline	D Mainline							
STATION	6009+670.000	6009+670.000	6009+670.000							
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT							
ELEVATION (m)	1284.61	1284.61	1284.61							
SAMPLE TYPE	SH	SH	SH							
DATE SAMPLED	5/12/2000	5/12/2000	5/12/2000							
SOIL CLASSIFICATION (USCS)	CL	CL	CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		96								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			47							
WET UNIT WEIGHT (kN/m^3)			17.4							
DRY UNIT WEIGHT (kN/m^3)			11.9							
SPECIFIC GRAVITY		2.79								
ATTERBERG LIMITS										
LIQUID LIMIT, LL	41	45								
PLASTICITY INDEX, PI	18	23								
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			102							
TORVANE (kPa)	72	67	53							
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1221

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-405	RB-405	RB-405	RB-405						
SAMPLE DEPTH (m)	0.61	1.52	4.57	7.62						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6010+290.000	6010+290.000	6010+290.000	6010+290.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1284.34	1284.34	1284.34	1284.34						
SAMPLE TYPE	SPT	SH	SH	SH						
DATE SAMPLED	5/16/2000	5/16/2000	5/16/2000	5/16/2000						
SOIL CLASSIFICATION (USCS)				CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	56			99						
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				47						
WET UNIT WEIGHT (kN/m^3)				17.4						
DRY UNIT WEIGHT (kN/m^3)				11.9						
SPECIFIC GRAVITY				2.71						
ATTERBERG LIMITS										
LIQUID LIMIT, LL										
PLASTICITY INDEX, PI										
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				66						
TORVANE (kPa)		72	124	29						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1222

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-406	RB-406	RB-406	RB-406						
SAMPLE DEPTH (m)	1.52	2.13	4.57	7.62						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6011+725.000	6011+725.000	6011+725.000	6011+725.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1285.77	1285.77	1285.77	1285.77						
SAMPLE TYPE	SH	SPT	SH	SH						
DATE SAMPLED	05/11/2000	05/11/2000	05/11/2000	05/11/2000						
SOIL CLASSIFICATION (USCS)			CL							
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		79								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)			31							
WET UNIT WEIGHT (kN/m^3)			18.9							
DRY UNIT WEIGHT (kN/m^3)			14.5							
SPECIFIC GRAVITY			2.81							
ATTERBERG LIMITS										
LIQUID LIMIT, LL			38							
PLASTICITY INDEX, PI			19							
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			127							
TORVANE (kPa)	57		77	43						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1223

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-407	RB-407	RB-407	RB-407						
SAMPLE DEPTH (m)	1.52	2.13	4.57	7.62						
LINE	D Mainline	D Mainline	D Mainline	D Mainline						
STATION	6012+320.000	6012+320.000	6012+320.000	6012+320.000						
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT						
ELEVATION (m)	1284.70	1284.70	1284.70	1284.70						
SAMPLE TYPE	SH	SPT	SH	SH						
DATE SAMPLED	05/11/2000	05/11/2000	05/11/2000	05/11/2000						
SOIL CLASSIFICATION (USCS)				CL						
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		98								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				41						
WET UNIT WEIGHT (kN/m^3)				17.9						
DRY UNIT WEIGHT (kN/m^3)				12.7						
SPECIFIC GRAVITY				2.77						
ATTERBERG LIMITS										
LIQUID LIMIT, LL				46						
PLASTICITY INDEX, PI				21						
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				71						
TORVANE (kPa)	59		29	43						
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1224

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-408	RB-408								
SAMPLE DEPTH (m)	1.52	4.57								
LINE	D Mainline	D Mainline								
STATION	6015+000.000	6015+000.000								
OFFSET (RT or LT)	0.00 RT	0.00 RT								
ELEVATION (m)	1284.90	1284.90								
SAMPLE TYPE	SH	SH								
DATE SAMPLED	5/16/2000	5/16/2000								
SOIL CLASSIFICATION (USCS)	ML									
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	73	94								
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	31									
WET UNIT WEIGHT (kN/m^3)	18.9									
DRY UNIT WEIGHT (kN/m^3)	14.4									
SPECIFIC GRAVITY	2.76									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	30									
PLASTICITY INDEX, PI	5									
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	58									
TORVANE (kPa)	38	38								
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1225

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-409	RB-409	RB-409	RB-409	RB-410	RB-410	RB-411	RB-411	RB-411	RB-412
SAMPLE DEPTH (m)	1.52	3.05	4.57	7.62	1.52	4.57	1.52	4.57	8.23	1.52
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline
STATION	6015+300.000	6015+300.000	6015+300.000	6015+300.000	6015+600.000	6015+600.000	6015+900.000	6015+900.000	6015+900.000	6016+150.000
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT
ELEVATION (m)	1284.12	1284.12	1284.12	1284.12	1284.15	1284.15	1284.99	1284.99	1284.99	1286.31
SAMPLE TYPE	SH	MC	SH	SH	SH	SH	SH	SH	SPT	SH
DATE SAMPLED	5/19/2000	5/19/2000	5/19/2000	5/19/2000	5/19/2000	5/19/2000	5/18/2000	5/18/2000	5/18/2000	5/18/2000
SOIL CLASSIFICATION (USCS)	ML	ML	CL		CL		CL	ML	CH	ML
GROUP CLASSIFICATION (AASHTO)		A-4			A-6				A-7-6	
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)		81			91		92	80	95	85
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	31		31		23		23	34		28
WET UNIT WEIGHT (kN/m^3)	16.4		21.3		20.2		20.3	18.8		19.6
DRY UNIT WEIGHT (kN/m^3)	12.5		16.2		16.4		16.5	14.0		15.3
SPECIFIC GRAVITY			2.85		2.75		2.76			
ATTERBERG LIMITS										
LIQUID LIMIT, LL	39				36		38		52	
PLASTICITY INDEX, PI	13				15		17		28	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)			28		132		214			
TORVANE (kPa)	57		24	34	72	29	124	29		57
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1226

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-412	RB-412	RB-413	RB-413	RB-413	RB-414	RB-414	RB-414	RB-415	RB-415
SAMPLE DEPTH (m)	4.57	7.62	1.52	4.57	7.62	1.52	4.57	7.62	1.52	7.62
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline
STATION	6016+150.000	6016+150.000	6016+500.000	6016+500.000	6016+500.000	6016+800.000	6016+800.000	6016+800.000	6017+100.000	6017+100.000
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT
ELEVATION (m)	1286.31	1286.31	1286.45	1286.45	1286.45	1287.09	1287.09	1287.09	1287.50	1287.50
SAMPLE TYPE	SH	MC	SH	SH	SH	SH	SH	SH	SH	SH
DATE SAMPLED	5/18/2000	5/18/2000	5/12/2000	5/12/2000	5/12/2000	5/11/2000	5/11/2000	5/11/2000	5/19/2000	5/19/2000
SOIL CLASSIFICATION (USCS)	CL	ML			CH	CL		ML	ML	CL
GROUP CLASSIFICATION (AASHTO)		A-4							A-4	
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	87	73				97		97	92	90
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	34				44	23		54		38
WET UNIT WEIGHT (kN/m^3)	19.2				18.4	20.2		17.2		18.2
DRY UNIT WEIGHT (kN/m^3)	14.3				12.8	16.5		11.2		13.2
SPECIFIC GRAVITY	2.76				2.76	2.83				
ATTERBERG LIMITS										
LIQUID LIMIT, LL	33				55	35		45		
PLASTICITY INDEX, PI	14				28	13		18		
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)					17	35				33
TORVANE (kPa)	29		72	19	34	81	34	34	67	34
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1227

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-417	RB-417	RB-417	RB-417	RB-418	RB-418	RB-419	RB-420	RB-420	RB-420
SAMPLE DEPTH (m)	1.52	4.57	6.10	7.62	1.52	4.57	3.66	1.52	4.57	7.62
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline
STATION	6017+700.000	6017+700.000	6017+700.000	6017+700.000	6017+960.001	6017+960.001	6018+299.985	6019+470.000	6019+470.000	6019+470.000
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.19 RT	0.19 RT	3.00 LT	0.00 RT	0.00 RT	0.00 RT
ELEVATION (m)	1284.89	1284.89	1284.89	1284.89	1284.89	1284.89	1288.08	1297.29	1297.29	1297.29
SAMPLE TYPE	SH	SH	MC	SH	SH	SH	SPT	SH	SH	SH
DATE SAMPLED	5/19/2000	5/19/2000	5/19/2000	5/19/2000	5/10/2000	5/10/2000	5/10/2000	5/11/2000	5/11/2000	5/11/2000
SOIL CLASSIFICATION (USCS)		CL		CL	CL	SM			CL	
GROUP CLASSIFICATION (AASHTO)				A-3	A-7-6					
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	78		70	97		93	53		84	
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)				38	29	36			28	
WET UNIT WEIGHT (kN/m^3)				18.4	19.0	18.3			21.2	
DRY UNIT WEIGHT (kN/m^3)				13.3	14.7	13.5			16.6	
SPECIFIC GRAVITY		2.77			2.78	2.82			2.77	
ATTERBERG LIMITS										
LIQUID LIMIT, LL		33			43				39	
PLASTICITY INDEX, PI		12			21				18	
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)				34	84				50	
TORVANE (kPa)	53	24		24	77	19		41	43	43
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1228

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, Inc. 2000

SUMMARY OF LABORATORY TEST DATA

DESCRIPTION										
BORING NO.	RB-421	RB-421	RB-421	RB-421	RB-422	RB-422	RB-422	RB-422	RB-423	RB-423
SAMPLE DEPTH (m)	1.52	4.57	6.71	7.62	1.52	3.66	6.10	7.62	2.13	8.53
LINE	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	D Mainline	Burke Lane	Burke Lane
STATION	6019+900.000	6019+900.000	6019+900.000	6019+900.000	6020+210.000	6020+210.000	6020+210.000	6020+210.000	4+220.000	4+220.000
OFFSET (RT or LT)	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT	0.00 RT
ELEVATION (m)	1297.92	1297.92	1297.92	1297.92	1295.40	1295.40	1295.40	1295.40	1291.57	1291.57
SAMPLE TYPE	SH	SH	SPT	SH	SH	SPT	SH	SH	SPT	SPT
DATE SAMPLED	5/17/2000	5/17/2000	5/17/2000	5/17/2000	5/11/2000	5/11/2000	5/11/2000	5/11/2000	5/12/2000	5/12/2000
SOIL CLASSIFICATION (USCS)	CL		SM				CL			
GROUP CLASSIFICATION (AASHTO)										
SIEVE ANALYSIS (percent passing)										
9.5mm SQUARE OPENING										
NO. 4 (4760 microns)										
NO. 100 (147 microns)										
NO. 200 (74 microns)	75		18			21			70	92
CLAY FRACTION (2 microns)										
MOISTURE CONTENT & UNIT WEIGHT										
MOISTURE CONTENT (%)	20		23				27			
WET UNIT WEIGHT (kN/m^3)	20.3						18.9			
DRY UNIT WEIGHT (kN/m^3)	16.9						14.8			
SPECIFIC GRAVITY	2.71									
ATTERBERG LIMITS										
LIQUID LIMIT, LL	36						36			
PLASTICITY INDEX, PI	14						16			
SHEAR STRENGTH										
UNDRAINED SHEAR STRENGTH, Su, (kPa)	109						149			
TORVANE (kPa)	62	53		48	34		57	48		
CORROSION										
pH										
RESISTIVITY (ohm-cm)										
WATER SOLUBLE SULFATE (ppm)										

KLEINFELDER

Project No.: 35-8163-05

SUMMARY OF LABORATORY TEST DATA

I-215 to I-15/US 89 Interchange

PLATE

K-1229

UDOTSUM (LEGACY 2) 35-8163-05 P.D. 6/2/00

Copyright Kleinfelder, inc. 2000

Appendix L

KLEINFELDER

APPLICATION FOR AUTHORIZATION TO USE

Legacy Parkway - Preferred Alternative
(project name)
35-8163-05
(project job number)
June 2, 2000
(date)

Kleinfelder, Inc.
2677 East Parley's Way
(office address)
Salt Lake City, Utah 84109
(city, state, zip)
(801)466-6769 (801)466-6788
(telephone) *(fax)*

To whom it may concern:

Applicant understands and agrees that the Geotechnical Field and Laboratory Investigations for the subject site is a copyrighted document, that Kleinfelder, Inc. is the copyright owner and that unauthorized use or copying of the Geotechnical Field and Laboratory Investigations for the subject site is strictly prohibited without the express written permission of Kleinfelder, Inc. Applicant understands that Kleinfelder, Inc. may withhold such permission at its sole discretion, or grant permission upon such terms and conditions as it deems acceptable.

Applicant agrees to accept the contractual terms and conditions between Kleinfelder, Inc. and HDR Engineering, Inc. originally negotiated for preparation of this Geotechnical Field and Laboratory Investigations. Use of this Geotechnical Field and Laboratory Investigations without permission releases Kleinfelder, Inc. from any liability that may arise from use of this ›ort.

To be Completed by Applicant

_____
(company name)

_____
(address)

_____
(city, state, zip)

_____ _____
(telephone) *(fax)*

By: _____

Title: _____

Date: _____

For Kleinfelder, Inc.'s use only

_____ approved for re-use with additional fee of $ _____
_____ disapproved, report needs to be updated

By: _____
(Kleinfelder, Inc. project manager)

Date: _____

Copyright 2000, Kleinfelder, Inc.